

Summary: Citations of LAROVA products in scientific literature

Larova Product	Application	Reference
dNTP	PCR for the detection of Brucella melitensis in blood and lymphoid tissues	1
	Serotonin Transporter Gene Polymorphisms and Sertraline Response	2
	Cytokines and chemokines in postovulatory follicle regression of domestic chicken	3
	Hypermethylation by intersegmental transfer of APOBEC3G cytidine deaminase	4
	Single nucleotide polymorphism (SNP) allele frequency estimation	5
	Occurrence of multiple infections with different Borrelia burgdorferi genospecies	6
	Microsatellite Genetic Differentiation Analysis	7
	Melanin biosynthesis in the maize pathogen Cochliobolus heterostrophus	8
	High doses of dietary zinc induce cytokines, chemokines, and apoptosis in reproductive tissues	9
	Reverse transcription using random pentadecamer primers increases yield and quality	10
	Ongoing somatic hypermutation in EBV transformed B-cells	12
	Linkage analysis in families diagnosed with type 1 von Willebrand disease	13
	Microsatellite analysis for determination of the mutagenicity	14
	Roflumilast inhibits leukocyte-endothelial cell interactions	15
	Soraprazan: Setting New Standards in Inhibition of Gastric Acid Secretion	16
	Anti-apoptotic and Pro-inflammatory Signaling in Cancer Cells	17
	Functional Impact of Phosphodiesterase 4 (PDE4) Subtypes in Human Primary Immune Cells	19
	TÜRKİYE'DE İZOLE EDİLEN SALMONELLA ENTERICA	20
	Systematic expression profiling of the gastric H ⁺ /K ⁺ ATPase in human tissue	21
Roflumilast inhibits leukocyte-endothelial cell interactions, expression of adhesion molecules and ...	23	
Development of simple sequence repeat markers	24	
Taq Polymerase	Cytokines and chemokines in postovulatory follicle regression of domestic chicken	3
	Methods for detecting the presence of or predisposition to autosomal dominant hypercholesterolemia	25
PCR Mix	Microsatellite Genetic Differentiation Analysis	7
	Cytosolic Phospholipase A2 {alpha} Is Targeted to the p47phox-PX	11
	Transplantation of Human Embryonic Stem Cell-Derived Cardiomyocytes	18
	Coding Tandem Repeats Generate Diversity in Aspergillus fumigatus Genes	22
ddNTP	Development of simple sequence repeat markers	24

Reference

(1) Comparison of culture and PCR for the detection of Brucella melitensis in blood and lymphoid tissues ...of serologically positive and negative slaughtered sheep

Z Ilhan, A Aksakal, IH Ekin, T Gulhan, H Solmaz, S ... - Letters in Applied Microbiology, **2008** - Blackwell Synergy
... Z. Ilhan, A. Aksakal, IH Ekin, T. Gülhan, H. Solmaz, S. Erdenlig (**2008**) Comparison
of ... 1 µl (10 mmol l⁻¹) each of the four **dNTPs (Larova, Teltow, Germany ...**
[Zitiert durch: 1](#) - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 3 Versionen](#)

KEYWORDS blood • Brucella melitensis • culture • lymphoid tissue • **PCR** • sheep

Abstract: Aims: To compare the culture and PCR methods for detection of Brucella melitensis in blood and lymphoid tissue samples obtained from slaughtered sheep (n = 162) testing positive/negative in serological tests (Rose Bengal test and serum agglutination test).

Methods and Results: Of 162 sheep examined, 45 were positive and 117 negative in serological tests. A PCR assay based on a pair of Br. melitensis-specific primers was used to detect DNA in blood and lymphoid tissue. Brucella melitensis was isolated from 1.2% (2/162) and 17.2% (28/162) of the blood and lymphoid tissue samples respectively. Positive PCR products with a molecular size of 731 bp were obtained from 27.7% (45/162) of blood and 29.0% (47/162) of lymphoid tissue samples.

Conclusions: The species-specific PCR assay detected a higher number of Br. melitensis DNA both from serologically positive (P < 0.01 in blood PCR, P < 0.001 in tissue PCR) and serologically negative (P < 0.001 in both blood PCR and tissue PCR) sheep compared with classical bacteriological culture methods.

Significance and Impact of the Study: The results emphasize the importance of using more than one type of diagnostic technique for the detection of animals positive for brucellosis, especially with epidemiological purposes.

(2) Serotonin Transporter Gene Polymorphisms and Sertraline Response in Major Depression Patients

- [AONE Full Text @ MBLC](#)

O Dogan, N Yuksel, MA Ergun, A Yilmaz, MN Ilhan, ... - Genetic Testing, **2008** - liebertonline.com
... Ankara, Turkey. GENETIC TESTING Volume 12, Number 2, **2008** ^a Mary Ann Liebert, Inc. ...
Reaction mixtures contained 100mmol of each **dNTP (Larova, Teltow, Germany)**. ...
[Ähnliche Artikel](#) - [Websuche](#) - [Alle 3 Versionen](#)

Abstract: Major depression (MD) has a complex multifactorial etiology with genetic and environmental factors contributing to the disorder. As with all antidepressant treatments, there is variability in drug response due to heredity, generally focusing on genetic polymorphism of the drug-metabolizing transporter genes. The serotonin transporter (5-HTT) gene is a particularly important candidate for genetic involvement in MD

disorders owing to its key role in the regulation of serotonergic transmission and is therefore considered to be an interesting candidate in the mechanism of antidepressant drugs. In this study, we have focused on the associations between genetic polymorphisms in two regions of the 5-HTT gene (5-HTTLPR and VNTR) related to sertraline responses. Our sample consisted of 64 unrelated Turkish subjects who strictly met DSM-IV and CGI scores. There was no significant difference between the frequency of the SS, LS, LL, 9/10, 10/10, 9/12, 10/12, and 12/12 genotypes and responses to sertraline. However, the number of patients can be increased and different drugs can be studied in order to find a specific pharmacogenetic relation.

(3)Cytokines and chemokines in postovulatory follicle regression of domestic chicken (*Gallus gallus ...domesticus*)

NR Sundaresan, VK Saxena, KVH Sastry, K Nagarajan, ... - Developmental and Comparative Immunology, **2008** - Elsevier

... The amplification was carried out in 25 µl volume, containing 10 pmol of each primer,

0.1 mM dNTP mix, 1 unit of **Taq DNA polymerase (Larova GmbH, Germany)** and ...

[Zitiert durch: 1](#) - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 2 Versionen](#)

Abstract: The mechanism of postovulatory follicle (POF) regression in birds is still poorly understood. In the current study, expression of IL-1 β , IL-6, GM-CSF, IFN- γ , IL-2, IL-4, IL-13, chCXCLi2, chCCLi2, chCCLi4, chCCLi7, IL-10 and TGF- β 2 mRNAs was estimated in regressing POF by semi-quantitative RT-PCR. In addition, the changes in immune cell population, histological and apoptotic changes were also studied in regressing POF. The expression of cytokines (IL-1 β , IL-6, IL-10 and TGF- β 2) and chemokines (chCXCLi2, chCCLi2, chCCLi4 and chCCLi7) was upregulated in POFs, suggesting a role for these molecules in tissue regression. The histological findings suggested a significant infiltration of immune cells, especially heterophils, lymphocytes and macrophages, into the regressing POF. The flow cytometry analysis of lymphocyte subpopulations revealed that CD3⁺, CD4⁺, CD8⁺ and Bu-1⁺ lymphocytes were significantly increased during this regression. The significant up-regulation of chemokines might have attracted the immune cells during POF regression. The percentage of apoptotic cells was significantly increased during the regression of POF. The up-regulation of IL-1 β , IL-6, IL-10 and TGF- β 2 and down-regulation of GM-CSF might have induced apoptosis during the POF regression. However, expression of IFN- γ , IL-2, IL-4 and IL-13 was not significantly altered during POF regression. In conclusion, cytokines appear to play an important role in the regression of POF in chicken. Furthermore, the regression of chicken POF seems to be an inflammatory event similar to luteolysis of the mammalian corpus luteum.

Keywords: Cytokines; Chemokines; Apoptosis; Immune cells; Postovulatory follicle; Chicken

(4)Hypermutation by intersegmental transfer of APOBEC3G cytidine deaminase

R Nowarski, E Britan-Rosich, T Shiloach, M Kotler - Nature Structural & Molecular Biology, **2008** - nature.com

... coli (NEB), in NEBuffer 1 (NEB) supplemented with 2 mM **dNTPs (Larova)**, for 3 ... Received

7 May **2008**; Accepted 2 September **2008**; Published online 28 September **2008** ...

[Websuche](#)

Deamination of cytidine residues in single-stranded DNA (ssDNA) is an important mechanism by which apolipoprotein B mRNA-editing, catalytic polypeptide-like (APOBEC) enzymes restrict endogenous and exogenous viruses. The dynamic process underlying APOBEC-induced hypermutation is not fully understood. Here we show that enzymatically active APOBEC3G can be detected in wild-type Vif(+) HIV-1 virions, albeit at low levels. *In vitro* studies showed that single enzyme-DNA encounters result in distributive deamination of adjacent cytidines. Nonlinear translocation of APOBEC3G, however, directed scattered deamination of numerous targets along the DNA. Increased ssDNA concentrations abolished enzyme processivity in the case of short, but not long,

DNA substrates, emphasizing the key role of rapid intersegmental transfer in targeting the deaminase. Our data support a model by which APOBEC3G intersegmental transfer via monomeric binding to two ssDNA segments results in dispersed hypermutation of viral genomes.

[\(5\) Single nucleotide polymorphism \(SNP\) allele frequency estimation in DNA pools using Pyrosequencingâ ...](#)

C Lavebratt, S Sengul - NATURE PROTOCOLS-ELECTRONIC EDITION-, 2007 - nature.com

... Denaturation buffer (Biotage); **dNTPs (Larova GmbH)**; DyNA Quant 200 Fluorometer (GE ... **2008** Nature Publishing Group – partner of AGORA, HINARI, CrossRef and ...

[Zitiert durch: 4](#) - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 2 Versionen](#)

[\(6\) Occurrence of multiple infections with different Borrelia burgdorferi genospecies in Danish Ixodes ...](#)

J Vennestrøm, H Egholm, PM Jensen - Parasitology International, **2008** - Elsevier

... Parasitology International Volume 57, Issue 1, March **2008**, Pages 32-37. ... MilliQ water,

2 µl of 10× PCR-buffer (Sigma), 0.4 µl 0.2 mM **dNTP (Larova)**, 2.8 µl ...

[Zitiert durch: 1](#) - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 2 Versionen](#)

Abstract: The pathogen *Borrelia burgdorferi* causes Lyme Borreliosis in human and animals world-wide. In Europe the pathogen is transmitted to the host by the vector *Ixodes ricinus*. The nymph is the primary instar for transmission to humans. We here study the infection rate of five *Borrelia* genospecies: *B. burgdorferi* sensu stricto, *B. afzelii*, *B. garinii*, *B. valaisiana*, *B. lusitaniae* in nymphs, by IFA and PCR. 600 nymphs were collected in North Zealand of Denmark. Each nymph was first analysed by IFA. If positive for spirochaetal infection, the genospecies was determined by PCR. The infection rate of *B. burgdorferi* sensu lato was 15.5%, with the primary genospecies being *B. afzelii* (64.3%), *B. garinii* (57.1%), and *B. lusitaniae* (26.8%). It is the first time *B. lusitaniae* is documented in Denmark.

Even though, the highest infection rate was discovered for *B. afzelii* and *B. garinii*, mixed infections are more common than single infections. Fifty-one percent (29/56) of these were infected with two genospecies, 7.1% (4/56) with three, and 5.3% (3/56) with four. We try to explain the high infection rate and the peculiar number of multiple infections, with a discussion of changes host abundance and occurrence of different transmission patterns.

Keywords: *Borrelia burgdorferi*; *B. lusitaniae*; *Ixodes ricinus*; Infection rate; Multiple infections; Co-feeding

Abbreviations: LBg, Lyme Borreliosis; PCR, Polymerase Chain Reaction; IFA, Immunofluorescence Assay

[\(7\) \[PDF\] ► Microsatellite Genetic Differentiation Analysis of Two Local Chicken Breeds Compared with Foreign Hy ...](#)

K Roushdy, AZ El-Dein, MM Fathi, UM Ali, HM Assy - International Journal of Poultry Science, **2008** - pjbs.org

... Page 2. Int. J. Poult. Sci., 7 (11): 1045-1053, **2008** 1046 University under the same

environmental, managerial ... The ***LAROVA** GmbH. Rheinstr. 17a. 14513 Telow. ... **Taq master**

[\(8\) Melanin biosynthesis in the maize pathogen Cochliobolus heterostrophus depends on two MAP kinases, ...](#)

N Eliahu, A Igbaria, MS Rose, BA Horwitz, S Lev - Eukaryotic Cell, 2007 - Am Soc Microbiol

The maize pathogen *Cochliobolus heterostrophus* requires two MAP kinases, Chk1 and Mps1, to produce normal pigmentation. Young colonies of *mps1* and *chk1* deletion mutants have a white and autolytic appearance, which was partially rescued by a hyperosmotic environment. We isolated the transcription factor Cmr1, an ortholog of *Colletotrichum lagenarium* Cmr1 and *Magnaporthe grisea* Pig1, which regulates melanin biosynthesis in *C. heterostrophus*. Deletion of *CMR1* in *C. heterostrophus* resulted in mutants that lacked dark pigmentation, and acquired an orange-pink color. In *cmr1*-deletion strains the expression of putative scytalone dehydratase (*SCD1*) and hydroxynaphthalene reductase (*BRN1* and *BRN2*) genes involved in melanin biosynthesis was undetectable, whereas expression of *PKS18*, encoding a polyketide synthase, was only moderately reduced. In *chk1* and *mps1* mutants expression of *PKS18*, *SCD1*, *BRN1*, *BRN2*, and the transcription factor *CMR1* itself was very low in young colonies, slightly up-regulated in ageing colonies, and significantly induced in hyperosmotic conditions, as compared to invariable high expression in wild type. These findings indicate that two MAP kinases, Chk1 and Mps1, affect Cmr1 at the transcriptional level, and this influence is partially overridden in stress conditions including ageing culture and hyperosmotic environment. Surprisingly, we found that the *CMR1* gene was transcribed in both sense and antisense directions, apparently producing mRNA as well as a long noncoding RNA transcript. Expression of the antisense *CMR1* was also Chk1 and Mps1-dependent. Analysis of chromosomal location of the melanin biosynthesis genes in *C. heterostrophus* resulted in identification of a small gene cluster comprising *BRN1*, *CMR1* and *PKS18*. Since expression of all three genes depends on Chk1 and Mps1 MAPKs, we suggest their possible epigenetic regulation.

This article has been cited by other articles:

- Zhao, X., Mehrabi, R., Xu, J.-R. (2007). Mitogen-Activated Protein Kinase Pathways and Fungal Pathogenesis. *Eukaryot Cell* 6: 1701-1714 [[Full Text](#)]

(9) High doses of dietary zinc induce cytokines, chemokines, and apoptosis in reproductive tissues ...

NR Sundaresan, D Anish, KVH Sastry, VK Saxena, K ... - Cell and Tissue Research, 2008 - Springer
... 544 Cell Tissue Res (2008) 332:543–554 ... out in a 25- μ l volume, containing 10 pmol
each primer, 0.1 mM dNTP mix, 1 U Taq DNA polymerase (**Larova, Germany**), and ...

Abstract In chickens, high levels of dietary zinc cause molting, and the reproductive system undergoes complete remodeling concomitant to feather replacement. In the present study, the expression profiles of cytokines and chemokines were investigated in the ovary and oviduct of control hens and of hens induced to molt by zinc feeding. The zinc-induced feed-intake suppression, the changes in corticosterone levels, the immune cell populations in the reproductive tract, and the apoptosis of reproductive tissues were analyzed. The expression of mRNAs for interleukin-6 (IL-6), interferon- γ (IFN- γ), the avian ortholog of mammalian IL-8 (chCXCLi2), and a chicken MIP-1 β -like chemokine (chCCLi2) in the ovary and of mRNAs for IL-1 β , IL-6, IFN- γ , transforming growth factor- β 2, chCXCLi2, and chCCLi2 in the oviduct were upregulated significantly during zinc-induced molting. A simultaneous feed-intake reduction was observed with higher expression of cytokines and chemokines. The results of the present investigation also suggested that the upregulation of corticosterone was closely associated with the increased expression of cytokines and chemokines. An increase in apoptosis within reproductive tissue during tissue regression was also noted.

We had previously observed the upregulation of these cytokines expression in an earlier study (molting by feed withdrawal). However, the pattern and the level of expression were different among these two methods. These findings indicate that cytokines might be a common mediator of tissue regression during molting induced by diverse methods, although the pattern of induction is different. Thus, a high dose of dietary zinc seems to induce reproductive regression via the upregulation of cytokines and chemokines, the suppression of feed intake, and the increase in serum corticosterone, resulting finally in the apoptosis of reproductive tissues.

Keywords Zinc-induced molting - Cytokines - Chemokines - Corticosterone - Apoptosis - Chicken (White Leghorn)

(10) [\[HTML\] ► Reverse transcription using random pentadecamer primers increases yield and quality of resulting ...](#)

M Stangegaard, IH Dufva, M Dufva - BIOTECHNIQUES, 2006 - molecularbiology.forums2054.biotechniques.com

... Current Issue: May 2008 May 2008 About the cover. ... was added to a final concentration of 500 µM each dATR dCTR and dGTR 300 µM **dTTP (Larova Biochemie GMBH ...**

Abstract: Reverse transcription of RNA is an invaluable method for gene expression analysis by real-time PCR or microarray methods. Random primers of varying lengths were compared with respect to their efficiency of priming reverse transcription reactions. The results showed that 15-nucleotide-long random oligonucleotides (pentadecamers) consistently yielded at least 2-fold as much cDNA as did random hexamers using either poly(A) RNA or an amplified version of messenger RNA (aRNA) as a template. The cDNA generated using pentadecamers did not differ in size distribution or the amount of incorporated label compared with cDNA generated with random hexamers. The increased efficiency of priming using pentadecamers resulted in reverse transcription of >80% of the template aRNA, while random hexamers induced reverse transcription of only 40% of the template aRNA. This suggests a better coverage of the transcriptome when using random pentadecamers over random hexamers. Using the same amount of aRNA as starting material, random pentadecamer-primed reactions resulted in 11-fold more genes being detected in whole transcriptome DNA microarray experiments than random hexamer-primed reactions. The results indicate that random pentadecamers can replace random hexamers in reverse transcription reactions on both poly(A) RNA and amplified RNA, resulting in higher cDNA yields and quality.

(11) [Cytosolic Phospholipase A2 {alpha} Is Targeted to the p47phox-PX Domain of the Assembled NADPH ...](#)

Z Shmelzer, M Karter, M Eisenstein, TL Leto, N ... - Journal of Biological Chemistry, 2008 - ASBMB

... for publication, June 18, 2008 , and in revised form, August 20, 2008. ... **Red Load Taq**

Master/high yield using Thermostable DNA polymerase (Larova, Germany) with ...

[Websuche](#)

We have previously demonstrated a physical interaction between cytosolic phospholipase A_{2α} (cPLA₂) and the assembled NADPH oxidase on plasma membranes following neutrophil stimulation. The aim of the present study was to define the exact binding sites between these two enzymes. Here we show,

based on blot overlay experiments, Förster resonance energy transfer analysis and studies in neutrophils from patients with chronic granulomatous disease deficient in p67^{phox} or p47^{phox}, that cPLA₂ specifically binds to p47^{phox} and that p47^{phox} is sufficient to anchor cPLA₂ to the assembled oxidase on the plasma membranes upon stimulation. Blot overlay and affinity binding experiments using subfragments of cPLA₂ and p47^{phox} demonstrated that the cPLA₂-C2 domain and the p47^{phox}-PX domain interact to form a complex that is resistant to high salt. Computational docking was used to identify hydrophobic peptides within these two domains that inhibited the association between the two enzymes and NADPH oxidase activity in electro-permeabilized neutrophils. These results were used in new docking computations that produced an interaction model. Based on this model, cPLA₂-C2 domain mutations were designed to explore its interaction p47^{phox} in neutrophil lysates. The triple mutant F35A/M38A/L39A of the cPLA₂-C2 domain caused a slight inhibition of the affinity binding to p47^{phox}, whereas the single mutant I67A was highly effective. The double mutant M59A/H115A of the p47^{phox}-PX domain caused a significant inhibition of the affinity binding to cPLA₂. Thus, Ile⁶⁷ of the cPLA₂-C2 domain is identified as a critical, centrally positioned residue in a hydrophobic interaction in the p47^{phox}-PX domain.

(12)Ongoing somatic hypermutation of the rearranged VH but not of the V-lambda gene in EBV-transformed ...

I Chezar, L Lobel-Lavi, M Steinitz, R Laskov - Molecular Immunology, **2008** - Elsevier
... of the initial AID-directed dC → dU lesions (Liu et al., **2008** ... Taq polymerase (Peqlab, Erlangen, GmbH), Taq buffer, 0.2 mM **dNTP mixture (LAROVA**, Teltow, Germany ...
[Websuche](#)

Abstract: Epstein-Barr virus (EBV) transforms human peripheral B cells into lymphoblastoid cell lines (LCLs) that secrete specific antibodies. In contrast to peripheral blood B cells, LCLs express the activation-induced cytidine deaminase (AID) gene, a key enzyme in the generation of somatic hypermutation (SHM) in immunoglobulin variable genes. We have previously studied an LCL that secretes a rheumatoid factor (RF: an IgM(λ) anti-IgG antibody) and identified the accumulation of SHM at a frequency of 1.5×10^{-3} mut/bp in the rearranged variable region heavy chain gene (VH) of its RF sub-culture (i.e., RF-2004). The aim of the present work was to find out whether SHM was initiated as an early event following EBV transformation. Our results show that already the earliest RF-culture (RF-1983) mutates its VH at a somewhat higher frequency of 1.9×10^{-3} . Overall, we detected 17 point mutations in the RF-2004 culture and in 26 cellular clones derived from the RF-1983 and RF-2004 cultures. Most of the mutations were due to C to T or G to A transitions, with preferential targeting to WRCH/DGYW hotspot motifs, indicating that they were due to the initial phase of AID-directed mutations. A genealogical tree demonstrates that mutations were accumulated in a stepwise manner with 1–2 mutations per cell division. However, no mutations were found in the rearranged V-lambda (Vλ) gene in the same RF-cultures and their subclones (i.e., $<1.2 \times 10^{-4}$ mut/bp). To our knowledge this is the first reported clonal cell line that generates SHM in the VH, but not in the Vλ. It may be due to abrogation of a cis-regulatory element(s) in the Vλ or to a lack of a specific trans-acting factor which differentially direct the SHM machinery to this gene. Out of the 17 point mutations detected in both cell lines there were, 1 stop codon, 3 mutations which obliterated the binding of the RF antibody to its IgG antigen and 1 or 2 mutations which enhanced antigen-binding affinity. These results show that the evolutionary developed germline encoded antibody combining site is highly sensitive to amino acid replacements. Our combined findings that the RF cells accumulate in a stepwise manner up to 1–2 point mutations/sequence per cell division and the generation of high percentage of functionally deleterious mutations, are in accord with the ‘multiphase-recycling model’ of SHM, which states that B cells in the germinal center are subjected to multiple rounds of somatic mutations interchanged with periods of antigenic selection.

Keywords: AID; Antibodies; B lymphocytes; Epstein-Barr virus; Lymphoblastoid cell line; Rheumatoid factor; Somatic hypermutation

Abbreviations: AID, activation-induced cytidine deaminase; BL, Burkitt lymphoma; CBL, cord blood lymphocytes; CSR, class switch recombination; EBV, Epstein-Barr virus; GAPDH, glyceraldehyde-3-phosphate dehydrogenase; GC, germinal center; LCL, lymphoblastoid cell line; PBL, peripheral blood lymphocytes; RF, rheumatoid factor; SHM, somatic hypermutation

(13) Linkage analysis in families diagnosed with type 1 von Willebrand disease in the European study, ...

J EIKENBOOM, V VAN MARION, H PUTTER, A GOODEVE, F ... - Journal of Thrombosis and Haemostasis, 2006 - Blackwell Synergy

... primer, 0.2 mm of each deoxynucleotide (**dNTP**) (**Larova, Teltow, Germany ... (2008)**) von

Willebrand disease (VWD): evidence-based diagnosis and management guidelines ...

[Zitiert durch: 27](#) - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 2 Versionen](#)

KEYWORDS

bleeding score • blood group • co-segregation • linkage analysis • type 1 • von Willebrand disease

See also Tosetto A, Rodeghiero F, Castaman G, Goodeve A, Federici AB, Battle J, Meyer D, Fressinaud E, Mazurier C, Goudemand J, Eikenboom J, Schneppenheim R, Budde U, Ingerslev J, Vorlova Z, Habart D, Holmberg L, Lethagen S, Pasi J, Hill F, Peake I. A quantitative analysis of bleeding symptoms in type 1 von Willebrand disease: results from a multicenter European study (MCMDM-1 VWD). This issue, pp 766–73; James PD, Paterson AD, Notley C, Cameron C, Hegadorn C, Tinlin S, Brown C, O'Brien L, Leggo J, Association of Hemophilia Clinic Directors of Canada, Lillicrap D. Genetic linkage and association analysis in type 1 von Willebrand disease (VWD): results from the Canadian Type 1 VWD Study. This issue, pp 783–92.

Abstract: Summary. Background: von Willebrand disease (VWD) type 1 is a congenital bleeding disorder caused by genetic defects in the von Willebrand factor (VWF) gene and characterized by a reduction of structurally normal VWF. The diagnosis of type 1 VWD is difficult because of clinical and laboratory variability. Furthermore, inconsistency of linkage between type 1 VWD and the VWF locus has been reported.

Objectives: To estimate the proportion of type 1 VWD that is linked to the VWF gene. **Patients and methods:** Type 1 VWD families and healthy control individuals were recruited. An extensive questionnaire on bleeding symptoms was completed and phenotypic tests were performed.

Linkage between VWF gene haplotypes and the diagnosis of type 1 VWD, the plasma levels of VWF and the severity of bleeding symptoms was analyzed. **Results:** Segregation analysis in 143 families diagnosed with type 1 VWD fitted a model of autosomal dominant inheritance. Linkage analysis under heterogeneity resulted in a summed lod score of 23.2 with an estimated proportion of linkage of 0.70. After exclusion of families with abnormal multimer patterns the linkage proportion was 0.46. LOD scores and linkage proportions were higher in families with more severe phenotypes and with phenotypes suggestive of qualitative VWF defects. About 40% of the total variation of VWF antigen could be attributed to the VWF gene. **Conclusions:** We conclude that the diagnosis of type 1 VWD is linked to the VWF gene in about 70% of families, however after exclusion of qualitative defects this is about 50%.

(14) Microsatellite analysis for determination of the mutagenicity of extremely low-frequency ...

RJ Mairs, K Hughes, S Fitzsimmons, KM Prise, A ... - Mut. Res.-Genetic Toxicology and Environmental Mutagenesis, 2007 - Elsevier

... out in a final volume of 12.5 µl consisting of 10 ng DNA, 0.3 µM forward primer, 0.3 µM reverse primer, 2.5 mM MgCl₂, **200 µM dNTPs** (Larova Biochemie GmbH ...

[Zitiert durch: 4](#) - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 4 Versionen](#)

Abstract: Extremely low-frequency electromagnetic fields (ELF-EMF) have been reported to induce lesions in DNA and to enhance the mutagenicity of ionising radiation. However, the significance of these findings is uncertain because the determination of the carcinogenic potential of EMFs has largely been based on investigations of large chromosomal aberrations.

Using a more sensitive method of detecting DNA damage involving microsatellite sequences, we observed that exposure of UVW human glioma cells to ELF-EMF alone at a field strength of 1 mT (50 Hz) for 12 h gave rise to 0.011 mutations/locus/cell. This was equivalent to a 3.75-fold increase in mutation induction compared with unexposed controls. Furthermore, ELF-EMF increased the mutagenic capacity of 0.3 and 3 Gy γ -irradiation by factors of 2.6 and 2.75, respectively. These results suggest not only that ELF-EMF is mutagenic as a single agent but also that it can potentiate the mutagenicity of ionising radiation.

Treatment with 0.3 Gy induced more than 10 times more mutations per unit dose than irradiation with 3 Gy, indicating hypermutability at low dose.

Keywords: ELF-EMF; Gamma radiation; Microsatellite mutations

(15)Roflumilast inhibits leukocyte-endothelial cell interactions, expression of adhesion molecules and ...

MJ Sanz, J Cortijo, MA Taha, M Cerdá-Nicolás, E ... - British Journal of Pharmacology, 2007 - nature.com

dATP, dCTP, dTTP and dGTP were from Larova GmbH, Teltow, Germany. ...

[Zitiert durch: 5](#) - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 2 Versionen](#)

Background and purpose:

The present study addressed the effects of the investigational PDE4 inhibitor roflumilast on leukocyte-endothelial cell interactions and endothelial permeability *in vivo* and *in vitro*.

Experimental approach:

In vivo, intravital video-microscopy was used to determine effects of roflumilast p.o. on leukocyte-endothelial cell interactions and microvascular permeability in rat mesenteric venules. *In vitro*, the effects of roflumilast N-oxide, the active metabolite of roflumilast in humans, and other PDE4 inhibitors on neutrophil adhesion to tumour necrosis factor α (TNF α)-activated human umbilical vein endothelial cells (HUVEC), E-selectin expression and thrombin-induced endothelial permeability was evaluated. Flow cytometry was used to determine the effect of roflumilast on **N**-formyl-methionyl-leucyl-phenylalanine (fMLP)-induced CD11b upregulation on human neutrophils.

(16)Soraprazan: Setting New Standards in Inhibition of Gastric Acid Secretion

- ► aspetjournals.org [HTML]

WA Simon, M Herrmann, T Klein, JM Shin, R Huber, J ... - Journal of Pharmacology and Experimental Therapeutics, **2007** - ASPET

... Received January 24, **2007**; accepted March 14, **2007**. ... hexanucleotide primers (Roche

Applied Science, Mannheim, Germany), dNTPs (**PCR 3 Mix; Larova**, Teltow, Germany ... 10 mM (each dNTP) dATP, dTTP, dGTP, dCTP

[Zitiert durch: 5](#) - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 4 Versionen](#)

After treatment of millions of patients suffering from gastroesophageal reflux disease (GERD) and other acid-related ailments with proton pump inhibitors, there are still unmet medical needs such as rapid and reliable pain relief, especially for nocturnal acid breakthrough. In this work, we introduce and characterize the biochemistry and pharmacology of the potassium-competitive acid blocker (P-CAB) soraprazan, a novel, reversible, and fast-acting inhibitor of gastric H,K-ATPase. Inhibitory and binding properties of soraprazan were analyzed together with its mode of action, its selectivity, and its in vivo potency. This P-CAB has an IC_{50} of 0.1 μ M if measured with ion leaky vesicles and of 0.19 μ M in isolated gastric glands. With a K_i of 6.4 nM, a K_d of 26.4 nM, and a B_{max} of 2.89 nmol/mg, this compound is a highly potent and reversible inhibitor of the H,K-ATPase. Soraprazan shows immediate inhibition of acid secretion in various in vitro models and in vivo and was found to be more than 2000-fold selective for H,K-ATPase over Na,K- and Ca-ATPases. Soraprazan is superior to esomeprazole in terms of onset of action and the extent and duration of pH elevation in vivo in the dog. Rapid and consistent inhibition of acid secretion by soraprazan renders the P-CABs a promising group of compounds for therapy of GERD.

(17) [PDF] ► [Anti-apoptotic and Pro-inflammatory Signaling in Cancer Cells: Status and Modulation by ...](#)

G Imre - ub.uni-konstanz.de

... vorgelegt von Gabriele Imre Tag der mündlichen Prüfung: 26. Februar 2007 Referent:

Prof. Dr. Klaus Schäfer Referent: Prof. Dr. Albrecht Wendel ...

[Ähnliche Artikel](#) - [HTML-Version](#) - [Websuche](#) dNTP mix PCR3

(18) [Transplantation of Human Embryonic Stem Cell-Derived Cardiomyocytes Improves Myocardial Performance ...](#)

- ► onlinejacc.org [HTML]

O Caspi, I Huber, I Kehat, M Habib, G Arbel, A ... - Journal of the American College of Cardiology, **2007** - Elsevier

... Available online 25 October **2007**. Objectives. ... Polymerase chain reaction was carried

out using **Red-Load-Taq-Master-Mix (LAROVA)**, Teltow, Germany). ...

[Zitiert durch: 28](#) - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 9 Versionen](#)

We evaluated the ability of human embryonic stem cells (hESCs) and their cardiomyocyte derivatives (hESC-CMs) to engraft and improve myocardial performance in the rat chronic infarction model.

(19) [PDF] ► [Functional Impact of Phosphodiesterase 4 \(PDE4\) Subtypes in Human Primary Immune Cells](#)

D Peter - ub.uni-konstanz.de

... Konstanzer Online-Publikations-System (KOPS) URL: <http://www.ub.uni-konstanz.de/kops/volltexte/2007/2311/> URN: [http://nbn-resolving.de/urn:nbn:de:bsz:352-opus ...](http://nbn-resolving.de/urn:nbn:de:bsz:352-opus...)

[Ähnliche Artikel](#) - [HTML-Version](#) - [Websuche](#) dNTPs

(20) [\[PDF\]](#) ► [TÜRKİYE'DE İZOLE EDİLEN SALMONELLA ENTERICA SEROTİP TYPHIMURIUM SUŞLARININ PLAZMİT PROFİLLERİ VE ...](#)

S ENTERICA - İnfeksiyon Dergisi (Turkish Journal of Infection), 2007 - [infeksiyon.dergisi.org](#)
... Cilt 21, Sayı 3, Temmuz 2007 ... Reaksiyon, 50 pmol primer, 200 µm dNTP mix (Larova, Teltow, Al- manya), 3.5 mM MgCl₂, 10X reaksiyon buffer (160 mM (NH₄)₂ ...
[Ähnliche Artikel](#) - [HTML-Version](#) - [Websuche](#)

(21) [Systematic expression profiling of the gastric H+/K+ ATPase in human tissue](#)

M Herrmann, J Selige, S Raffael, G Sachs, A ... - Scandinavian Journal of Gastroenterology, 2007 - [informaworld.com](#)
... April 2007) ISSN 0036-5521 print/ISSN 1502-7708 online # 2007 Taylor & ... Science),
dNTPs (PCR 3 Mix, Larova, Teltow, Germany) and avian myeloblastosis virus (AMV ...
[Ähnliche Artikel](#) - [Websuche](#) - [Alle 2 Versionen](#)

(22) [Coding Tandem Repeats Generate Diversity in Aspergillus fumigatus Genes](#) ▽ †

- ► [nih.gov](#) [HTML]

E Levdansky, J Romano, Y Shadkchan, H Sharon, KJ ... - Eukaryotic Cell, 2007 - Am Soc Microbiol
... Received 16 July 2006/ Accepted 30 May 2007. ... PCR was performed with the **Red Load**
Taq master mix (Larova GmbH, Teltow, Germany) with the following designed ...
[Zitiert durch: 7](#) - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 8 Versionen](#)

(23) [Roflumilast inhibits leukocyte-endothelial cell interactions, expression of adhesion molecules and ...](#)

MJ Sanz, J Cortijo, MA Taha, M Cerdá-Nicolás, E ... - British Journal of Pharmacology, 2007 - [nature.com](#)
... probe set for 18sRNA (calibrator) was as described before (Peter et al., 2007). ... SA,
Seraing, Belgium and dATP, dCTP, dTTP and dGTP were from Larova GmbH, Teltow ...
[Zitiert durch: 4](#) - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 2 Versionen](#)

Background and purpose:

The present study addressed the effects of the investigational PDE4 inhibitor roflumilast on leukocyte-endothelial cell interactions and endothelial permeability *in vivo* and *in vitro*.

Experimental approach:

In vivo, intravital video-microscopy was used to determine effects of roflumilast p.o. on leukocyte-endothelial cell interactions and microvascular permeability in rat mesenteric venules. *In vitro*, the effects of roflumilast N-oxide, the active metabolite of roflumilast in humans, and other PDE4 inhibitors on neutrophil adhesion to tumour necrosis factor α (TNF α)-activated human umbilical vein endothelial cells (HUVEC), E-selectin

expression and thrombin-induced endothelial permeability was evaluated. Flow cytometry was used to determine the effect of roflumilast on *N*-formyl-methionyl-leucyl-phenylalanine (fMLP)-induced CD11b upregulation on human neutrophils.

(24) ^[PDF] ► **Development of simple sequence repeat markers in rye (*Secale cereale* L.)**

B Saal, G Wricke - GENOME, 1999 - article.pubs.nrc-cnrc.gc.ca

... Inserts were sequenced manually by cycle sequencing (Promega) or by LAROVA GmbH (Teltow, Germany) on an automated LEICOR 4000 fluorescent sequencing system ...

citation by: 81 - [Ähnliche Artikel](#) - [Websuche](#) - [Alle 6 Versionen](#)

(25) **Methods for detecting the presence of or predisposition to autosomal dominant hypercholesterolemia**

MA Fadel, C Boileau, JP Rabes, NG Seidah, M Varret - US Patent 7,300,754, 2007 - Google Patents

... (io) Patent No.: US 7,300,754 B2 (45) Date of Patent: Nov. 27, 2007 OTHER PUBLICATIONS ...

US Patent Nov. 27, 2007 Sheet 1 of 4 US 7,300,754 B2 •n — I m ' ...

[Ähnliche Artikel](#) - [Websuche](#) - [Alle 3 Versionen](#) thermostable DNA polymerase

Abstract: The present invention discloses the identification of a human hypercholesterolemia causal gene, which can be used for the diagnosis, prevention and treatment of hypercholesterolemia, more particularly familial hypercholesterolemia, as well as for the screening of therapeutically active drugs. The invention more specifically disclosed that mutations in the PCSK9 gene encoding NARC-1 causes autosomal dominant hypercholesterolemia and represent novel targets for therapeutic intervention. The invention can be used in the diagnosis of predisposition to, detection, prevention and/or treatment of coronary heart disease and, cholesterol, lipid and lipoprotein metabolism disorders, including familial hypercholesterolemia, atherogenic dyslipidemia, atherosclerosis, cardiovascular diseases.