



Universiteit  
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## **Production and characterization of recombinant human lactoferrin**

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# **Production and characterization of recombinant human lactoferrin**



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door

**Henricus Antonius van Veen**

geboren te Boskoop in 1969

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*Voor mijn vader*



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24p3	:	mouse 24p3/uterocalin
A2UMRP	:	rat $\alpha_2$ -microglobulin-related protein
bLF	:	bovine LF
bNGAL	:	bovine neutrophil gelatinase-associated lipocalin
bSA	:	bovine serum albumin
EDTA	:	ethylene diamine tetra-acetic acid
ELISA	:	enzyme-linked immunosorbent assay
Fe-hLF	:	iron-saturated hLF
hLF	:	human LF
hNGAL	:	human neutrophil gelatinase-associated lipocalin
hTF	:	human transferrin
Kd	:	dissociation constant
LF	:	lactoferrin
Lfc	:	lactoferricin
LPS	:	lipopolysaccharide
mAb	:	monoclonal antibody
Mr	:	relative molecular weight
NK	:	natural killer
NOAEL	:	no-observed-adverse-effect level
PBS	:	phosphate buffered saline
PDB	:	protein data bank
PTG	:	PBS-Tween-Gelatine
pI	:	isoelectric point
pLF	:	porcine lactoferrin
rC-lobe	:	recombinant C-lobe
rhLF	:	recombinant hLF
rhLF <sup>cDNA</sup>	:	rhLF derived from the Rey hLF-cDNA sequence
rhLF <sup>gen</sup>	:	rhLF derived from an hLF-genomic DNA sequence
rhLF <sup>Gln138/479</sup>	:	rhLF <sup>cDNA</sup> with mutations Thr <sup>130</sup> →Ile, Cys <sup>404</sup> →Gly, Asn <sup>138/479</sup> →Gln
RIA	:	radioimmunoassay
rms	:	root mean square
rN-lobe	:	recombinant N-lobe
SBTI	:	soybean trypsin inhibitor
SDS-PAGE	:	sodium dodecyl sulfate-polyacrylamide gel electrophoresis