

Active Recombinant Human Neutrophil gela-tinase-associated lipocalin

Cat. No. LCN2-4H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	The NGAL we can provide is humanized recombinant protein , and it has strong immunogenicity.
Species	Human
Source	E.coli
Description	Neutrophil gelatinase-associated lipocalin (NGAL) is a 25KD glucoprotein and a new member of lipocalin family with a typical β -barrel structure of the family. Based on the recent research, the function of NGAL protein may be is to protect and regulate the activity of matrix metalloproteinase-9(MMP-9) and to involve in inflammation and innate immunity reaction. NGAL protein also is a novel iron transporter that mediates a new iron delivery pathway.Acute kidney injury(AKI) is a syndrome characterized by loss of function in a short time (hours to days).The scarcity of early biomarker for AKI has hindered our ability to launch the therapy for this disease.Neutrophil gelatinase-associated lipocalin(NGAL) is a high efficient clinical biomarker for AKI. At present , Cystatin C is widely used for AKI clinical diagnosis. However, compared to Cystatin C , NGAL diagnosis value for AKI is much higher .
Predicted N Terminal	Gln 21
Form	Liquid
Bio-activity	Measured by its ability to bind Iron(III) dihydroxybenzoic acid [Fe(DHBA)3]. The

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	binding of Fe(DHBA) ₃ results in the quenching of Trp fluorescence in recombinant human Lipocalin-2.
Molecular Mass	The recombinant human NGAL consists of 197 amino acids. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhLCN2 is approximately 25 kDa as predicted.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method
Purity	> 95% as determined by SDS-PAGE
Applications	It can be used to prepare high titer anti-NGAL antibody . And at the same time the NGAL protein can also be used as positive control in NGAL diagnosis Kit (renal function analysis , AKI analysis).
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.6 months from date of receipt, -20 to -70 °C as supplied.3 months, -20 to -70 °C under sterile conditions after opening.
Concentration	1 mg/ml
Storage Buffer	20 mM Tris pH 7.5, 20% glycerol

GENE INFORMATION

Gene Name	LCN2 lipocalin 2 [Homo sapiens]
Official Symbol	LCN2
Synonyms	LCN2; lipocalin 2; lipocalin 2 (oncogene 24p3); neutrophil gelatinase-associated lipocalin; 24p3; neutrophil gelatinase associated lipocalin; NGAL; oncogene 24p3;

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	siderocalin; p25; lipocalin-2; migration-stimulating factor inhibitor; 25 kDa alpha-2-microglobulin-related subunit of MMP-9; MSFI;
Gene ID	3934
mRNA Refseq	NM_005564
Protein Refseq	NP_005555
MIM	600181
UniProt ID	P80188
Chromosome Location	9q34
Function	binding; iron ion binding; transporter activity;