Recombinant Mouse LCN2 Protein (Met1-Asn200)

Cat. No. LCN2-797M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse LCN2 Protein (NP_032517.1) (Met1-Asn200) was produced by HEK293 Cells expression system.
Species	Mouse
Source	HEK293
ProteinLength	Met1-Asn200
Description	Lipocalin-2 (LCN2), also known as neutrophil gelatinase-associated lipocalin (NGAL), is a 25 kDa protein belonging to the lipocalin superfamily. It was initially found in activated neutrophils, however, many other cells, like kidney tubular cells, may produce NGAL in response to various insults. This protein is released from injured tubular cells after various damaging stimuli, is already known by nephrologists as one of the most promising biomarkers of incoming Acute Kidney Injury (AKI). Recent evidence also suggests its role as a biomarker in a variety of other renal and non-renal conditions. Moreover, recent studies seem to suggest a potential involvement of this factor also in the genesis and progression of chronic kidney diseases. NGAL is the first known mammalian protein which specifically binds organic molecules called siderophores, which are high-affinity iron chelators. NGAL, first known as an antibacterial factor of natural immunity, and an acute phase protein, is currently one of the most interesting and enigmatic proteins involved in the process of tumor development. acting as an intracellular iron carrier and protecting MMP9 from proteolytic degradation, NGAL has a clear pro-tumoral effect, as has already been

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	observed in different tumors (e.g. breast, stomach, oesophagus, brain) in humans. In thyroid carcinomas, NGAL is strongly induced by NF-kB, an important factor involved both in tumor growth and in the link between chronic inflammation and neoplastic development. Thus, Lipocalin-2 (LCN2/NGAL) has been implicated in a variety of processes including cell differentiation, proliferation, survival and morphogenesis.
Predicted N Terminal	Gln 21
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Molecular Mass	The recombinant mouse LCN2 consists of 180 amino acids and predicts a molecular mass of 20.9 kDa.
Endotoxin	< 1.0 EU per μg protein as determined by the LAL method.
Purity	> 95 % as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -70 centigrade.
Storage	Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4℃ before opening to recover the entire contents.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are

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	shipped out with blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	Lcn2 lipocalin 2 [Mus musculus]
Official Symbol	LCN2
Synonyms	LCN2; lipocalin 2; p25; lipocalin-2; 24p3; Sip24; AW212229;
Gene ID	16819
mRNA Refseq	NM_008491
Protein Refseq	NP_032517
UniProt ID	P11672

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