



NGAL Recombinant Protein

CATALOG NUMBER: 92-610

Specifications

SPECIES:	Mouse
SOURCE SPECIES:	Human Cells
SEQUENCE:	Gln21-Asn200
FUSION TAG:	C-Fc tag
TESTED APPLICATIONS:	
APPLICATIONS:	This recombinant protein can be used for biological assays. For research use only.

Properties

PURITY:	Greater than 95% as determined by reducing SDS-PAGE. Endotoxin level less than 0.1 ng/ug (1 IEU/ug) as determined by LAL test.
PREDICTED MOLECULAR WEIGHT:	48 kD
PHYSICAL STATE:	Liquid
BUFFER:	Supplied as a 0.2 um filtered solution of 20mM MES, 150mM NaCl, 10% Glycerol, pH 5.5. It is not recommended to reconstitute to a concentration less than 100 ug/ml. Dissolve the lyophilized protein in ddH ₂ O.
STORAGE CONDITIONS:	Store at -20°C, stable for 6 months after receipt. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Additional Info

ALTERNATE NAMES:	Neutrophil gelatinase-associated lipocalin, NGAL, Lipocalin-2, SV-40-induced 24P3 protein, Siderocalin LCN2, p25, LCN2
ACCESSION NO.:	P11672

Background

Lipocalin-2, also known as Neutrophil Gelatinase-Associated Lipocalin (NGAL), is a secretory protein of the lipocalin superfamily. Lipocalin-2 contains a signal peptide that enables it to be secreted and form complexes with matrix metalloproteinase-9 (MMP-9) through disulfide bonds. Similar to other lipocalin family members, Lipocalin-2 is involved in diverse cellular processes, including the transport of small hydrophobic molecules, protection of MMP-9 from proteolytic degradation, and cell signaling. Furthermore, Lipocalin-2 can tightly bind to bacterial siderophore through a cell surface receptor, possibly serving as a potent bacteriostatic agent by sequestering iron, regulating innate immunity and protecting kidney epithelial cells from ischemia-reperfusion injury. This protein is mainly expressed in neutrophils and in lower levels in the kidney, prostate, and epithelia of the respiratory and alimentary tracts. Recent evidence also suggests its role as a biomarker for renal injury and inflammation.

FOR RESEARCH USE ONLY

December 14, 2016