Recombinant Protein Technical Manual

Recombinant Mouse NGAL/Lipocalin-2 Protein (Fc Tag)

RPES1047

Product Data:

Product SKU: RPES1047

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: P11672

Protein Information:

Molecular Mass:	48 kDa
AP Molecular Mass:	55-60 kDa
Tag:	C-Fc
Bio-activity:	
Purity:	> 95% as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 µm filtered solution of 20mM MES, 150mM NaCl, 10% Glycerol, pH 5.5.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Neutrophil gelatinase-associated lipocalin; NGAL; Lipocalin-2; SV-40-induced 24P3 protein; Siderocalin LCN2; p25; LCN2

Immunogen Information:

Sequence: Gln21-Asn200

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.