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

Catalog Number: PKSM041250

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

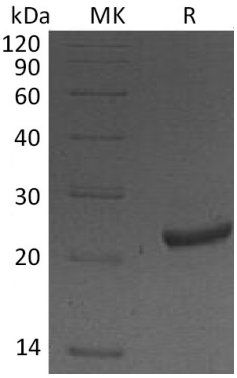
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse NGAL/Lipocalin-2 protein Gln21-Asn200 , with an C-terminal His
Calculated MW	21.9 kDa
Observed MW	20-28 kDa
Accession	P11672
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per μg of the protein 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/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as a 0.2 μm filtered solution of 20mM Histidine-HCl, 8% Trehalose, 2% Glycine, 50mM NaCl, 0.05% Tween 80, pH6.5.

Data



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.