

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

**Catalog Number: PKSM041250**

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

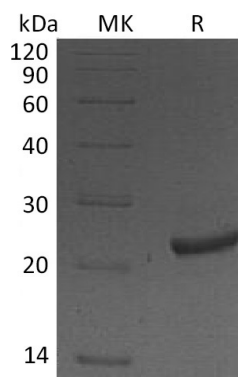
### Description

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

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Concentration</b>	Subject to label value.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	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.
<b>Formulation</b>	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.

### For Research Use Only