# Recombinant Human NGAL/Lipocalin-2 Protein (His Tag, Human Cells)



Catalog Number:PKSH032806

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

## **Description**

Synonyms Neutrophil gelatinase-associated lipocalin;NGAL;25 kDa alpha-2-microglobulin-

related subunit of MMP-9;Lipocalin-2;Oncogene 24p3;Siderocalin

LCN2;p25;HNL;NGAL

Species Human

**Expression Host** HEK293 Cells **Sequence** Gln21-Gly198

AccessionP80188Calculated Molecular Weight21.6 kDaObserved molecular weight23 kDaTagC-His

### **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin** < 1.0 EU per µg of the protein as determined by the LAL method.

Storage Storage Store at  $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles.

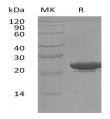
**Shipping** This product is provided as liquid. It is shipped at frozen temperature with blue

ice/gel packs. Upon receipt, store it immediately at < - 20°C.

**Formulation** Supplied as a 0.2 µm filtered solution of PBS, 50% Glycerol, pH 7.4.

**Reconstitution** Not Applicable

#### Data



> 95 % as determined by reducing SDS-PAGE.

# **Background**

LCN2 is iron-trafficking protein involved in multiple processes such as apoptosis; innate immunity and renal development. LCN2 binds iron through association with 2;5-dihydroxybenzoic acid (2;5-DHBA); a siderophore that shares structural similarities with bacterial enterobactin; and delivers or removes iron from the cell; depending on the context. LCN2 is involved in apoptosis due to interleukin-3 (IL3) deprivation: iron-loaded form increases intracellular iron concentration without promoting apoptosis; while iron-free form decreases intracellular iron levels; inducing expression of the proapoptotic protein BCL2L11/BIM; resulting in apoptosis. LCN2 is involved in innate immunity; possibly by sequestrating iron; leading to limit bacterial growth.

#### For Research Use Only

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