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

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

Catalog Number: PKSH032806



Description **Species** Human Mol Mass 21.6 kDa Accession P80188 **Bio-activity** Not validated for activity **Properties** > 95 % as determined by reducing SDS-PAGE. Purity Endotoxin < 1.0 EU per µg of the protein as determined by the LAL method. Store at  $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles. Storage This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel Shipping packs. Upon receipt, store it immediately at  $< -20^{\circ}$ C. Formulation Supplied as a 0.2 µm filtered solution of PBS, 50% Glycerol, pH 7.4. Reconstitution Not Applicable

Data

kDa	MK	R
120 90 60		
40	No. of Concession, Name	
30		
20	Sec. 1	-
14	-	-

> 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