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		
Species		Human
Source		HEK293 Cells-derived Human NGAL; Lipocalin-2 protein Gln21-Gly198, with an C-
		terminal His
Calculated MW	τ	21.6 kDa
Observed MW		23 kDa
Accession		P80188
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 $< -20^{\circ}$ C.
Formulation		Supplied as a 0.2 µm filtered solution of PBS, 50% Glycerol, pH 7.4.
Data		
	kDa 120 90 60	MK R



> 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.