

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

Catalog Number: PKSH032806

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

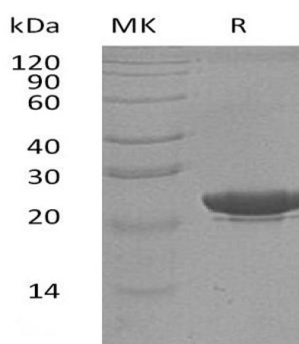
### Description

|                      |  |
|----------------------|--|
| <b>Species</b>       | Human  |
| <b>Source</b>        | HEK293 Cells-derived Human NGAL;Lipocalin-2 protein Gln21-Gly198, with an C-terminal His |
| <b>Calculated MW</b> | 21.6 kDa   |
| <b>Observed MW</b>   | 23 kDa   |
| <b>Accession</b>     | P80188   |
| <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 PBS, 50% Glycerol, pH 7.4.   |

### 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 BCL2L1/BIM; resulting in apoptosis. LCN2 is involved in innate immunity; possibly by sequestering iron; leading to limit bacterial growth.

### For Research Use Only