



Recombinant Protein Technical Manual
Recombinant Human NGAL/Lipocalin-2 Protein (His
Tag, Human Cells)
RPES0435

Product Data:

Product SKU: RPES0435

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P80188

Protein Information:

Molecular Mass: 21.6 kDa

AP Molecular Mass: 23 kDa

Tag: C-6His

Bio-activity:

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

Endotoxin: < 1.0 EU per µg 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°C.

Formulation: Supplied as a 0.2 µm filtered solution of PBS, 50% glycerol, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

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

Immunogen Information:

Sequence: Gln21-Gly198

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 sequestering iron, leading to limit bacterial growth.