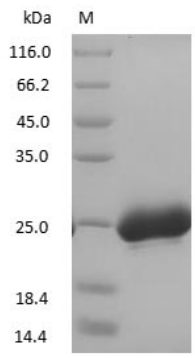
Human Neutrophil gelatinase-associated lipocalin protein

Product Code	CSB-NP068341h
Relevance	Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development. 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. Iron-bound form (holo-24p3) is internalized following binding to the SLC22A17 (24p3R) receptor, leading to release of iron and subsequent increase of intracellular iron concentration. In contrast, association of the iron-free form (apo-24p3) with the SLC22A17 (24p3R) receptor is followed by association with an intracellular siderophore, iron chelation and iron transfer to the extracellular medium, thereby reducing intracellular iron concentration. 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. Involved in innate immunity, possibly by sequestrating iron, leading to limit bacterial growth.
Storage	Aliquot and store at -20°C or -80°C. Avoid repeated freeze/thaw cycles.
Tested Applications	ELISA, WB, SDS-PAGE. Latex enhanced turbidimetric immunoassay (LETIA), immunogen and other possible
Form	Liquid
Storage Buffer	PBS, pH 7.4
Alias	N/A
Product Type	Native Protein
Sensitivity	Not test
Purity	>95% (SDS-PAGE)
Sequence	Full length protein
Research Area	Immunology
Source	Purified from Human urine
Protein Names	Human Neutrophil gelatinase-associated lipocalin protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.