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Lipocalin-2 Blocking Peptide
Catalog # PBV10369b

Specification

Lipocalin-2 Blocking Peptide - Product Information

Primary Accession	P11672
Gene ID	16819
Calculated MW	22875

Lipocalin-2 Blocking Peptide - Additional Information

Gene ID 16819

Application & Usage	**The peptide is used for blocking the antibody activity of Lipocalin-2. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.**

Other Names
Neutrophil gelatinase-associated lipocalin, NGAL, Lipocalin-2, SV-40-induced 24P3 protein, Siderocalin LCN2, p25, Lcn2

Target/Specificity
Lipocalin-2

Formulation
50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
Lipocalin-2 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

Lipocalin-2 Blocking Peptide - Protein Information

Name Lcn2

Function
Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development (PubMed:12453413). Binds iron through association with 2,3-dihydroxybenzoic acid

(2,3- 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; limits bacterial proliferation by sequestering iron bound to microbial siderophores, such as enterobactin (PubMed:15531878, PubMed:16446425). Can also bind siderophores from M.tuberculosis (By similarity).

Cellular Location
Secreted. Cytoplasmic granule lumen {ECO:0000250|UniProtKB:P80188}. Cytoplasmic vesicle lumen {ECO:0000250|UniProtKB:P80188}. Note=Upon binding to the SLC22A17 (24p3R) receptor, it is internalized (PubMed:16377569). Releases the bound iron in the acidic lumen of cytoplasmic vesicles (By similarity) {ECO:0000250|UniProtKB:P80188, ECO:0000269|PubMed:16377569}

Tissue Location
Expressed in the cortical tubules of the kidney (at protein level) (PubMed:30418175). Also expressed in the medullary tubules of the kidney (PubMed:30418175). Detected in lung, spleen, uterus, vagina and epididymis (PubMed:8687399)

Lipocalin-2 Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Lipocalin-2 Blocking Peptide - Images