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Lipocalin-2 Antibody
Purified Rabbit Polyclonal Antibody
Catalog # ABV11565

Specification

Lipocalin-2 Antibody - Product Information

Application	**WB**
Primary Accession	P80188
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**22588**

Lipocalin-2 Antibody - Additional Information

Gene ID 3934

Other Names
Lcn2, Lcn 2, Lipocalin2, Lipocalin 2

Target/Specificity
Lipocalin-2

Formulation
100 µg (0.5 mg/ml) affinity purified rabbit anti-Lipocalin 2 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling
The antibody solution should be gently mixed before use.

Background Descriptions

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

Lipocalin-2 Antibody - Protein Information

Name LCN2

Synonyms HNL, NGAL {ECO:0000303|PubMed:8060329}

Function
Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development (PubMed:12453413, PubMed:<a href="http://www.uniprot.org/citations/27780864"

target="_blank">27780864, PubMed:20581821). 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 (By similarity). Involved in innate immunity; limits bacterial proliferation by sequestering iron bound to microbial siderophores, such as enterobactin (PubMed:27780864). Can also bind siderophores from M.tuberculosis (PubMed:15642259, PubMed:21978368).

Cellular Location
Secreted. Cytoplasmic granule lumen. Cytoplasmic vesicle lumen. Note=Upon binding to the SLC22A17 (24p3R) receptor, it is internalized (By similarity). Releases the bound iron in the acidic lumen of cytoplasmic vesicles (PubMed:12453413, PubMed:20581821). {ECO:0000250|UniProtKB:P11672, ECO:0000269|PubMed:12453413, ECO:0000269|PubMed:20581821}

Tissue Location
Detected in neutrophils (at protein level) (PubMed:7683678, PubMed:8298140). Expressed in bone marrow and in tissues that are prone to exposure to microorganism (PubMed:9339356) High expression is found in bone marrow as well as in uterus, prostate, salivary gland, stomach, appendix, colon, trachea and lung (PubMed:9339356). Expressed in the medullary tubules of the kidney (PubMed:30418175). Not found in the small intestine or peripheral blood leukocytes (PubMed:9339356).

Lipocalin-2 Antibody - 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 Antibody - Images

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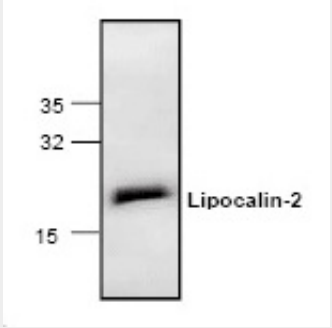

Western blot analysis of using recombinant human Lipocalin-2.

Lipocalin-2 Antibody - Background

Lipocalin 2 is from a family of proteins that are involved in the transportation of small hydrophobic molecules including steroids, retinoids, bilin and retinods. Lipocalins have been linked to many biolchemical processes such as immune response, pheromone transport, biological prostaglandin synthesis, retinoid binding, and cancer cell interactions.