

Lipocalin-2 Antibody

Purified Rabbit Polyclonal Antibody Catalog # ABV11562

Specification

Lipocalin-2 Antibody - Product Information

Application WB
Primary Accession P11672

Reactivity
Host
Clonality
Human, Mouse, Rat
Rabbit
Polyclonal

Isotype Rabbit IgG
Calculated MW 22875

Lipocalin-2 Antibody - Additional Information

Gene ID 16819

Other Names

Lipocalin2, Lipocalin 2, Lcn2, Lcn 2, Lcn-2, Neutrophil gelatinase associated lipocalin, NGAL

Target/Specificity

Lipocalin

Formulation

 $100 \mu g$ (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

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

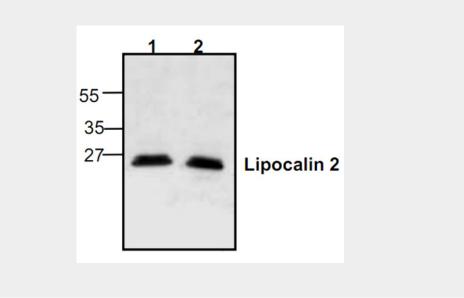
Expressed in the cortical tubules of the kidney (at protein level) (PubMed:30418175). Also expressed in the medullary tubules of the kidney (PubMed:30418175). Detected in lung, spleen, uterus, vagina and epididymis (PubMed:8687399)

Lipocalin-2 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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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.