

**Anti-Lipocalin-2/NGAL Antibody**  
**Catalog # ABO10707****Specification**

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**Anti-Lipocalin-2/NGAL Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P30152</a>
Host	Rabbit
Reactivity	Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Neutrophil gelatinase-associated lipocalin(LCN2) detection.  
Tested with WB, IHC-P in Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Lipocalin-2/NGAL Antibody - Additional Information**

**Gene ID** 170496

**Other Names**

Neutrophil gelatinase-associated lipocalin, NGAL, Alpha-2-microglobulin-related protein, Alpha-2U globulin-related protein, Lipocalin-2, Siderocalin LCN2, p25, Lcn2

**Calculated MW**

22476 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, By Heat<br> <br>Western blot, 0.1-0.5 µg/ml, Rat<br>

**Subcellular Localization**

Secreted . Upon binding to the SLC22A17 (24p3R) receptor, it is internalized. .

**Protein Name**

Neutrophil gelatinase-associated lipocalin(NGAL)

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of rat Lipocalin 2(38-53aa LQPGFWTERFQGRWVFV).

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-Lipocalin-2/NGAL Antibody - Protein Information**

**Name** Lcn2

**Function**

Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development (By similarity). 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. Can also bind siderophores from M.tuberculosis (By similarity).

**Cellular Location**

Secreted {ECO:0000250|UniProtKB:P80188}. 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 (By similarity). Releases the bound iron in the acidic lumen of cytoplasmic vesicles (By similarity). {ECO:0000250|UniProtKB:P11672, ECO:0000250|UniProtKB:P80188}

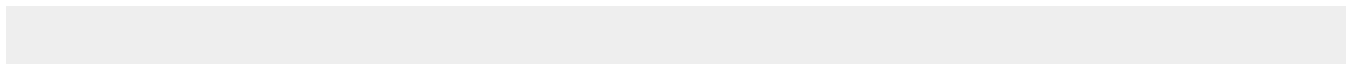
**Tissue Location**

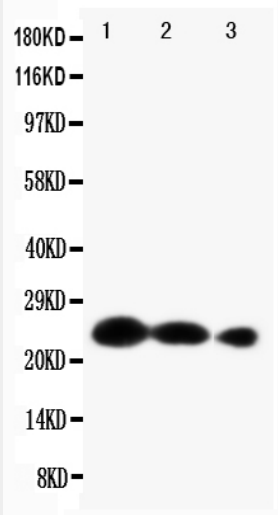
Detected in the ureteric bud in embryonic kidney (at protein level).

**Anti-Lipocalin-2/NGAL Antibody - Protocols**

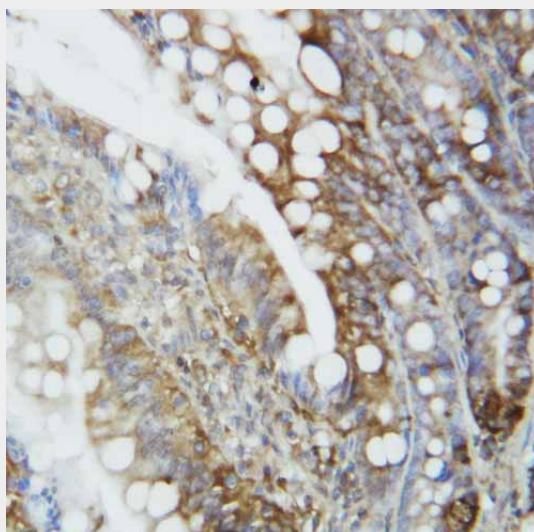
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Lipocalin-2/NGAL Antibody - Images**



Anti-Lipocalin 2 antibody, ABO10707, Western blotting Lane 1: Recombinant Rat NGAL Protein 10ng Lane 2: Recombinant Rat NGAL Protein 5ng Lane 3: Recombinant Rat NGAL Protein 2.5ng



Anti-Lipocalin 2 antibody, ABO10707, IHC(P)IHC(P): Rat Intestine Tissue Lysate

### Anti-Lipocalin-2/NGAL Antibody - Background

Euophile gelatinase-associated lipocalin(NGAL) is a protein that in humans is encoded by the LCN2 gene. The binding of lipocalin-2 to bacterial siderophores is important in the innate immune response to bacterial infection. Upon encountering invading bacteria the toll-like receptors on immune cells stimulate the synthesis and secretion of lipocalin-2. Secreted lipocalin-2 then limits bacterial growth by sequestering iron-containing siderophores. Lipocalin-2 also functions as a growth factor.