# abcam

### Product datasheet

## Anti-Lipocalin-2 / NGAL antibody [29] ab70287

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#### Overview

Product name Anti-Lipocalin-2 / NGAL antibody [29]

**Description** Rat monoclonal [29] to Lipocalin-2 / NGAL

Host species Rat

**Specificity** ab70287 binds Lipocalin-2 / NGAL in mouse serum.

**Tested applications** Suitable for: IHC-P

Species reactivity Reacts with: Mouse

**Immunogen** Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze /

thaw cycle.

**Storage buffer** pH: 7.40

Preservative: 0.097% Sodium azide

Constituents: 2.9% Sodium chloride, 0.0268% PBS

**Purity** Protein A purified

**Purification notes** ab70287 is protein A/G purified.

**Clonality** Monoclonal

Clone number 29

**Isotype** lgG1

Light chain type kappa

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#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab70287 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	**** <u>(1)</u>	Use at an assay dependent concentration.  Microwave pretreatment using citrate buffer pH 6, is recommended.

#### **Target**

#### **Function**

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.

#### Tissue specificity

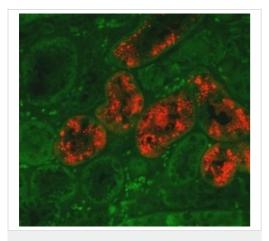
Expressed in bone marrow and in tissues that are prone to exposure to microorganism. High expression is found in bone marrow as well as in uterus, prostate, salivary gland, stomach, appendix, colon, trachea and lung. Not found in the small intestine or peripheral blood leukocytes.

#### Sequence similarities

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

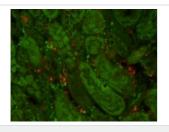
Belongs to the calycin superfamily. Lipocalin family.

## **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lipocalin-2 / NGAL antibody [29] (ab70287)

Lipocalin-2 / NGAL expression in the ischemia-reperfusion injured mouse kidney; detected with anti-mouse Lipocalin-2 / NGAL antibody (ab70287) (1:1000).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lipocalin-2 / NGAL antibody [29] (ab70287)

Lipocalin-2 / NGAL expression 2 days after the introduction of ischemic-reperfusion injured mouse kidney; detected with ab70287 at 1/1000.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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