

Anti-Lipocalin-2 / NGAL antibody ab41105

★★★★★ [7 Abreviews](#) [17 References](#) [2 Images](#)

Overview

Product name	Anti-Lipocalin-2 / NGAL antibody
Description	Rabbit polyclonal to Lipocalin-2 / NGAL
Host species	Rabbit
Specificity	A customer has submitted a positive Abreview for rat samples in IHC. However, customers have experienced problems with rat samples and this is likely due to the low homology between the immunogen and the rat protein (30%). Some batches of this antibody may work in rat, but this is not batch tested.
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Recombinant Human Lipocalin-2 / NGAL protein (ab95007) can be used as a positive control in WB. ab41105 gave a positive result in Human Colon Tissue Lysate.
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: PBS</p> <p>Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.</p>

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab41105 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
WB	★★★★★ (3)	Use a concentration of 1 µg/ml. Detects a band of approximately 21 kDa (predicted molecular weight: 23 kDa).
ICC/IF		Use a concentration of 5 µg/ml.

Target

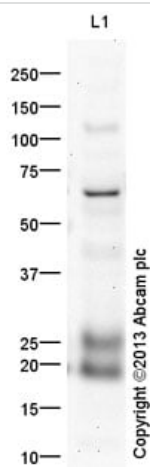
Function Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development. Binds iron through association with 2,5-dihydroxybenzoic acid (2,5-DHBA), a siderophore that shares structural similarities with bacterial enterobactin, and delivers or removes iron 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 sequestering 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 Belongs to the calycin superfamily. Lipocalin family.

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

Images



Western blot - Anti-Lipocalin-2 / NGAL antibody (ab41105)

Anti-Lipocalin-2 / NGAL antibody (ab41105) at 1 µg/ml + Human colon tissue lysate - total protein (**ab30051**) at 30 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/10000 dilution

Developed using the ECL technique.

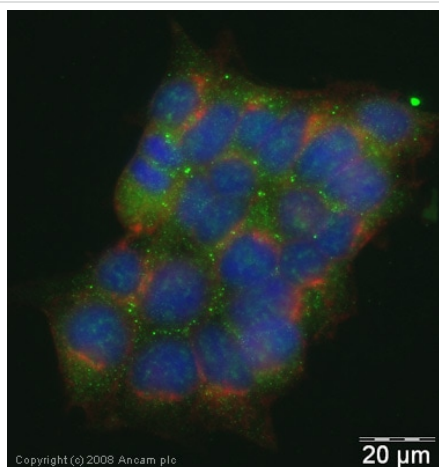
Performed under reducing conditions.

Predicted band size: 23 kDa

Observed band size: 21 kDa

Additional bands at: 25 kDa, 70 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 12 minutes



Immunocytochemistry/ Immunofluorescence - Anti-Lipocalin-2 / NGAL antibody (ab41105)

ICC/IF image of ab41105 stained human Hek293 cells. The cells were methanol fixed (10 min), permeabilised in 0.1% PBS-Tween (20 min) and incubated with the antibody (ab41105, 5 µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat serum / 0.3M glycine was used to block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue).

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

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