

Product datasheet

Recombinant Human Lipocalin-2 / NGAL protein ab95007

[1 References](#) [2 Images](#)

Description

Product name	Recombinant Human Lipocalin-2 / NGAL protein
Purity	> 95 % SDS-PAGE. Filtered (0.22 µm). Purified using Ni-NTA resin
Endotoxin level	> 0.200 Eu/mg
Expression system	Escherichia coli
Accession	<u>P80188</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MPLGLLWLGL ALLGALHAQA QDSTSDLIPA PPLSKVPLQQ NFQDNQFQ GK WYVVLGAGNA ILREDKDPQK MYATYELKE DKSYNVTSVL FRKKKCDYWI RTFVPGCQPG EFTLGNIKSY PGLTSYLVRV VSTNYNQHAM VFFKKVSQNR EYFKITLYGR TKELTSELKE NFIRFSKSLG LPENHIVFPV PIDQCIDG
Predicted molecular weight	24 kDa
Amino acids	21 to 198
Tags	His tag N-Terminus
Additional sequence information	N-terminal His-tag and TEV cleavage site, 28 extra AA.

Specifications

Our **Abpromise guarantee** covers the use of **ab95007** in the following tested applications.

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

Applications	Western blot Immunoprecipitation ELISA
Form	Lyophilized

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

Constituent: PBS

Reconstitution

Add deionized water to prepare a working stock solution of approximately 1 mg/mL and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture. Aliquot reconstituted protein to avoid repeated freezing /thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.

General Info

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.

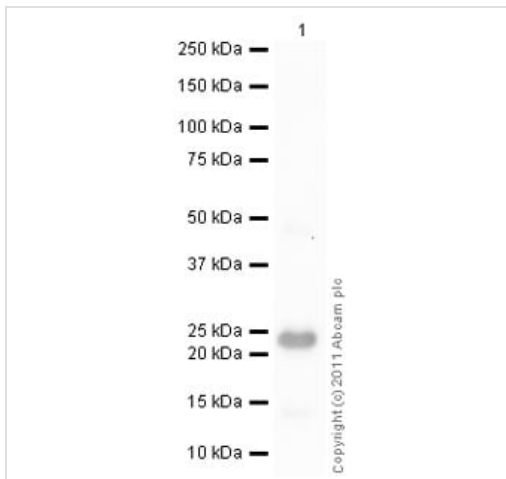
Sequence similarities

Belongs to the calycin superfamily. Lipocalin family.

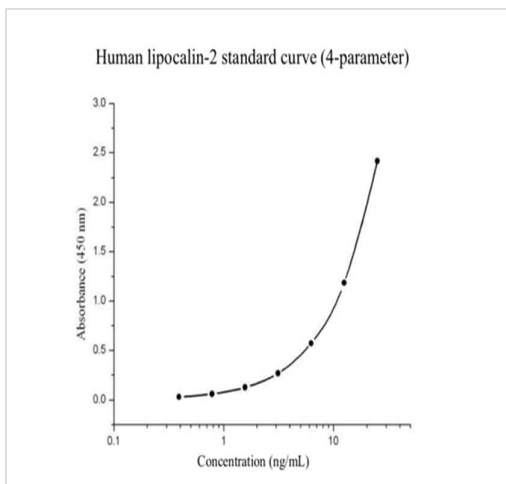
Cellular localization

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

Images



Western blot - Recombinant Human Lipocalin-2 /
NGAL protein (ab95007)



ELISA - Recombinant Human Lipocalin-2 / NGAL
protein (ab95007)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors