

## Product datasheet

# Recombinant Rat Lipocalin-2 / NGAL protein ab188053

1 Image

### Description

<b>Product name</b>	Recombinant Rat Lipocalin-2 / NGAL protein
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>P30152</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Rat
<b>Sequence</b>	MGLGVLCLALVLLGVLQSQAQDSTQNLIPAPPLISVPLQP GFWTERFQGR WFFVGLAGNAVQKERQSRFTMYSTIYELQEDNSYNVTSIL VRGQGCRYWI RTFVPSSSRPGQFTLGNHSYPQIQSYDVQVADTDYDQFAM VFFQKTSENK QYFKVTLYGRTKGLSDELKERFVSFAKSLGLKDNNVFSV PTDQCIDN
<b>Predicted molecular weight</b>	22 kDa
<b>Amino acids</b>	1 to 198

### Specifications

Our **Abpromise guarantee** covers the use of **ab188053** in the following tested applications.

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

<b>Applications</b>	ELISA
<b>Form</b>	Liquid

### Preparation and Storage

<b>Stability and Storage</b>	Shipped at 4°C. Store at +4°C.  pH: 7.40 Constituents: 0.81% Sodium chloride, 0.5% BSA, 0.5% Tween, 0.0016% Phenol red, 98% PBS, 0.1% Proclin 950
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## 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.

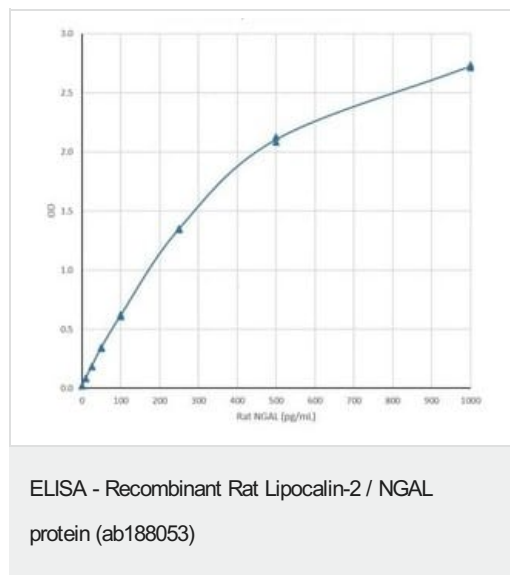
### Sequence similarities

Belongs to the calycin superfamily. Lipocalin family.

### Cellular localization

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

## Images



ELISA calibration curve using ab188053 as a standard

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

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