

Product datasheet

Anti-Lipocalin-2 / NGAL antibody [5G5] ab23477

★★★★☆ 2 Abreviews 12 References 4 Images

Overview

Product name	Anti-Lipocalin-2 / NGAL antibody [5G5]
Description	Mouse monoclonal [5G5] to Lipocalin-2 / NGAL
Host species	Mouse
Specificity	ab23477 is specific for Lipocalin-2 / NGAL, native and denatured forms.
Tested applications	Suitable for: IHC-P, ELISA, IHC-FoFr, WB
Species reactivity	Reacts with: Human
Immunogen	Full length native protein (purified) corresponding to Human Lipocalin-2/ NGAL. Full length native human neutrophil gelatinase associated lipocalin isolated from neutrophils.
Positive control	Capa-2, BxPC-3, ASPC1 cell line

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at 4°C or -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituents: 0.0268% PBS, 2.9% Sodium chloride
Purity	Protein G purified
Clonality	Monoclonal
Clone number	5G5
Myeloma	x63-Ag8.653
Isotype	IgG1
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab23477** 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	★★★★☆	1/10. PubMed: 18317594
ELISA		1/30000.
IHC-FoFr		1/10.
WB	★★★★☆	1/1000. Detects a band of approximately 25-35 kDa (predicted molecular weight: 23 kDa). Non reducing conditions will give multiple bands of 35, 70 and 55 kDa. Do not use serum for blocking as serum will contain Lipocalin 2

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.

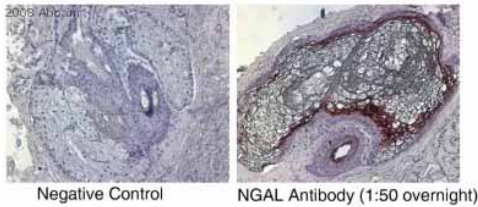
Sequence similarities

Belongs to the calycin superfamily. Lipocalin family.

Cellular localization

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

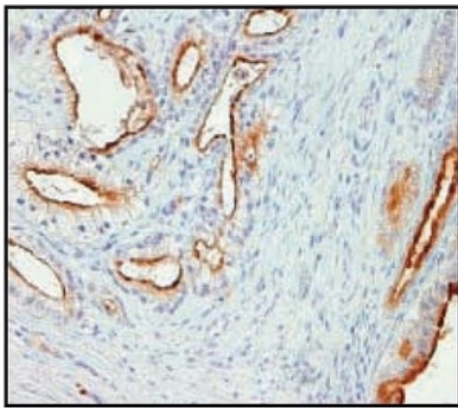
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipocalin-2 / NGAL antibody [5G5] (ab23477)

This image is courtesy of an anonymous Abreview

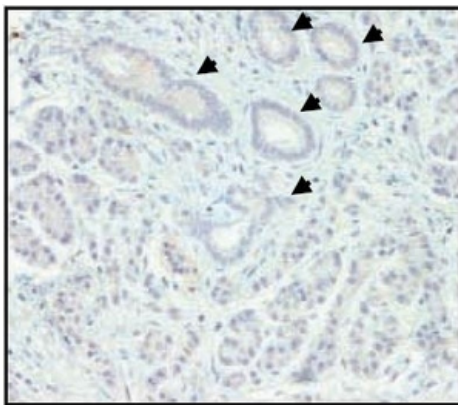
ab23477 staining human skin tissue sections by IHC-P. Sections were fixed in 10% neutral buffered formalin and subjected to heat mediated antigen retrieval prior to blocking with 1% BSA for 1 hour at 25°C. The primary antibody was diluted 1/50 and incubated with the sample for 20 hours at 4°C. A biotinylated horse anti-mouse antibody diluted 1/200 was used as the secondary.



(PaCa)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipocalin-2 / NGAL antibody [5G5] (ab23477)

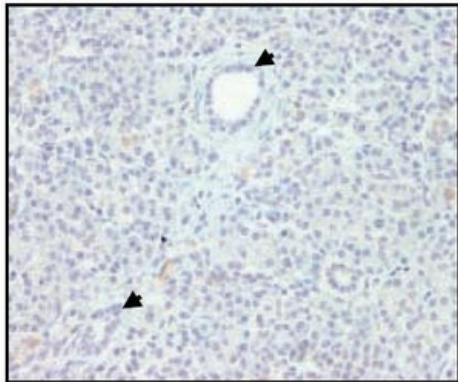
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human PaCa tissue sections labelling Lipocalin 2 with ab23477.



Chronic pancreatitis (CP)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipocalin-2 / NGAL antibody [5G5] (ab23477)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human chronic pancreatitis tissue sections labelling Lipocalin-2 / NGAL with ab23477.



Normal pancreas

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipocalin-2 / NGAL antibody [5G5] (ab23477)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of normal human pancreas tissue sections labelling Lipocalin-2 / NGAL with ab23477.

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