

Pig Lipocalin-2 ELISA Kit ab207924

[3 References](#) [1 Image](#)

Overview

Product name Pig Lipocalin-2 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
U1	8	220ng/ml		= 2%
U2	8	34.2ng/ml		= 4%
P1	8	134ng/ml		= 2%
P2	8	206ng/ml		= 2%

Inter-assay

Sample	n	Mean	SD	CV%
U1	8	220ng/ml		= 4%
U2	8	34.2ng/ml		= 5%
P1	8	134ng/ml		= 3%
P2	8	206ng/ml		= 10%

Sample type Urine, Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity = 1 pg/ml

Range 4 pg/ml - 400 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Urine	= 99	51.5pg/ml - 350pg/ml

Sample type	Average %	Range
Plasma	= 98	44.5pg/ml - 326pg/ml

Assay time

4h 00m

Assay duration

Multiple steps standard assay

Species reactivity

Reacts with: Pig

Product overview

Abcam's Pig Lipocalin-2 ELISA Kit (ab207924) is an *in vitro* enzyme-linked immunosorbent assay (ELISA) for the quantitative measurement of Neutrophil Gelatinase-Associated Lipocalin levels in urine, plasma or serum.

The assay is a sandwich ELISA performed in microwells coated with a mouse monoclonal antibody against pig NGAL. Bound NGAL is detected with another mouse monoclonal antibody labeled with biotin and the assay is developed with horseradish peroxidase (HRP)-conjugated streptavidin and a color-forming substrate.

Notes

NGAL (neutrophil gelatinase-associated lipocalin) belongs to the lipocalin family of proteins. These are small secreted proteins characterized by their ability to bind small hydrophobic molecules in a structurally conserved pocket formed by β -pleated sheet, to bind to specific cell-surface receptors, and to form macromolecular complexes. NGAL has many synonyms: perhaps the most widely used is lipocalin 2 (LCN 2); more recently the name siderocalin has been used to express NGAL's ability to bind bacterial siderophores. As NGAL was first reported as oncogene 24p3 in the mouse, this name is still occasionally used to identify NGAL in other species.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions

Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
25x Wash Buffer Solution	1 x 40ml
5x Sample Diluent Buffer	1 x 50ml
Biotinylated Pig-NGAL Antibody	1 x 12ml
HRP-Streptavidin Solution	1 x 12ml
Microwell plate, 96 precoated wells	1 x 96 tests
Pig NGAL Standard (0 pg/mL)	1 x 1ml
Pig NGAL Standard (10 pg/mL)	1 x 1ml
Pig NGAL Standard (100 pg/mL)	1 x 1ml
Pig NGAL Standard (20 pg/mL)	1 x 1ml
Pig NGAL Standard (200 pg/mL)	1 x 1ml

Components	1 x 96 tests
Pig NGAL Standard (40 pg/mL)	1 x 1ml
Pig NGAL Standard (400 pg/mL)	1 x 1ml
Stop Solution	1 x 12ml
TMB Substrate Solution	1 x 12ml

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.

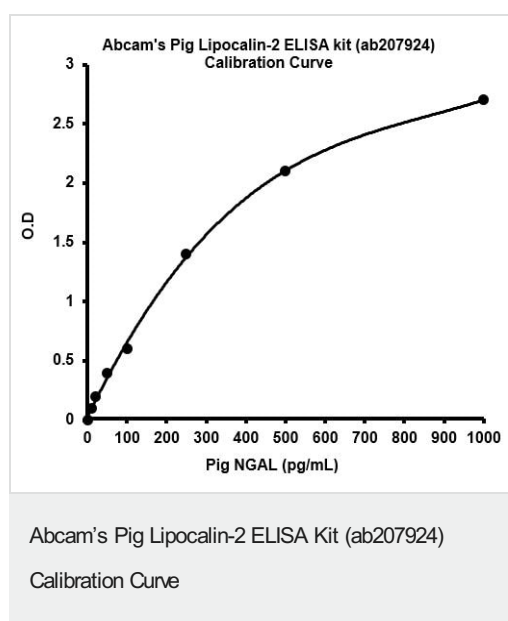
Sequence similarities

Belongs to the calycin superfamily. Lipocalin family.

Cellular localization

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

Images



Abcam's Pig Lipocalin-2 ELISA Kit (ab207924) Calibration Curve

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