

Datasheet: PHP302

BATCH NUMBER 100005643

Description:	RECOMBINANT HUMAN NGAL
Name:	NGAL
Other names:	Lipocalin-2
Format:	Rec. Protein
Product Type:	Recombinant Protein
Quantity:	10 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified recombinant protein - lyophilized
Reconstitution	Centrifuge vial prior to reconstitution. Reconstitute to 100 µg/ml by adding 100 µl ddH ₂ O. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. Do not vortex.
Preparation	Recombinant protein expressed in <i>E. coli</i> and purified by ion exchange chromatography
Buffer Solution	50 mM Tris-HCl, pH8.0, 0.15 M NaCl
Preservative Stabilisers	1.0% Trehalose
Approx. Protein Concentrations	100 µg/ml after reconstitution

**External Database
Links**

UniProt:

[P80188](#) [Related reagents](#)

Entrez Gene:

[3934](#) LCN2 [Related reagents](#)

Synonyms

HNL, NGAL

Product Information

Recombinant Human NGAL

Neutrophil Gelatinase-Associated Lipocalin (NGAL) is also known as lipocalin-2, 24 kDa alpha-2-microglobulin-related subunit of MMP-9 and siderocalin. NGAL is a 198 amino acid 25 kDa secreted protein which possesses a lipid binding domain which enables it to bind small hydrophobic ligand molecules such as bacterial siderophores ([Bauvois & Susin 2018](#), [Abella et al. 2015](#)). As well as the 25 kDa form, NGAL can exist as a 46 kDa homodimer and a 130 kDa heterodimer with MMP-9. The interaction with MMP-9 occurs in the extracellular space upon secretion of both proteins. It is through this interaction that MMP-9 proteolytic activity can be inhibited ([Chakraborty et al. 2012](#)).

NGAL is expressed in various cell types including adipocytes, hepatocytes, pneumocytes, splenocytes, mesangial and microglial cells. NGAL has also been observed circulating at low levels in urine and blood of healthy subjects (40-109 ng/ml) . However it is overexpressed during various inflammatory, metabolic, neurologic and cancer pathologies. The higher levels of NGAL expression in these diseases have been correlated with disease severity and poor prognosis ([Bauvois & Susin 2018](#), [Chakraborty et al. 2012](#)).

This recombinant Human NGAL can be used to create a standard curve in a sandwich ELISA with purified Mouse anti Human NGAL antibody, clone D11-6D10 ([MCA6198GA](#)) as a capture antibody and biotinylated Mouse anti Human NGAL antibody, clone D02-7D4 ([MCA6199B](#)) as the detection antibody.

**Protein Molecular
Weight**

22.2 kDa

Purity

≥90 % determined by coomassie blue staining of a reducing SDS-PAGE gel

Amino Acid Sequence

QDSTSDLIPA PPLSKVPLQQ NFQDNQFQ GK WYVVGLAGNA ILREDKDPQK
MYATIYELKE DKSYNVTSVL FRKKKCDYWI RTFVPGCQPG EFTLGNIKSY
PGLTSLVLRV VSTNYNQHAM VFFKKVSQNR EYFKITLYGR TKELTSELKE
NFIRFSKSLG LPENHIVFPV PIDQCIDG

Storage

Prior to reconstitution store at -70°C. Following reconstitution store at -80°C.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the protein. Should this product contain a precipitate we recommend

microcentrifugation before use.

Guarantee Guaranteed for 3 months from the date of reconstitution or until the date of expiry, whichever comes first. Please see label for expiry date.

Health And Safety Information Material Safety Datasheet documentation #20394 available at: 20394: <https://www.bio-rad-antibodies.com/uploads/MSDS/20394.pdf>

Regulatory For research purposes only

Related Products

Recommended Useful Reagents

[MOUSE ANTI HUMAN NGAL \(MCA6198GA\)](#)

[MOUSE ANTI HUMAN NGAL:Biotin \(MCA6199B\)](#)

ELISA Matched Pair - Capture Antibody

[MOUSE ANTI HUMAN NGAL \(MCA6198GA\)](#)

ELISA Matched Pair - Detection Antibody

[MOUSE ANTI HUMAN NGAL:Biotin \(MCA6199B\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
'M380426:210511'

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