

Datasheet for ABIN7320459

Lipocalin 2 Protein (LCN2) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	100 µg
Target:	Lipocalin 2 (LCN2)
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Lipocalin 2 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse NGAL/Lipocalin-2 Protein (His Tag)(Active)
Sequence:	Met 1-Asn 200
Characteristics:	A DNA sequence encoding the mouse LCN2 (NP_032517.1) precursor (Met 1-Asn 200) was expressed with a C-terminal polyhistidine tag.
Purity:	> 97 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to bind Iron(III) dihydroxybenzoic acid [Fe(DHBA)3]. The binding of Fe(DHBA)3 results in the quenching of Trp fluorescence in recombinant mouse Lipocalin-2. Recombinant mouse Lipocalin-2 can bind >1.0 µM of Fe(DHBA)3.

Target Details

Target:	Lipocalin 2 (LCN2)
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Target Details

Alternative Name: NGAL/Lipocalin-2 ([LCN2 Products](#))

Background: Lipocalin-2 (LCN2), also known as neutrophil gelatinase-associated lipocalin (NGAL), is a 25 kDa protein belonging to the lipocalin superfamily. It was initially found in activated neutrophils, however, many other cells, like kidney tubular cells, may produce NGAL in response to various insults. This protein is released from injured tubular cells after various damaging stimuli, is already known by nephrologists as one of the most promising biomarkers of incoming Acute Kidney Injury (AKI). Recent evidence also suggests its role as a biomarker in a variety of other renal and non-renal conditions. Moreover, recent studies seem to suggest a potential involvement of this factor also in the genesis and progression of chronic kidney diseases. NGAL is the first known mammalian protein which specifically binds organic molecules called siderophores, which are high-affinity iron chelators. NGAL, first known as an antibacterial factor of natural immunity, and an acute phase protein, is currently one of the most interesting and enigmatic proteins involved in the process of tumor development. acting as an intracellular iron carrier and protecting MMP9 from proteolytic degradation, NGAL has a clear pro-tumoral effect, as has already been observed in different tumors (e.g. breast, stomach, oesophagus, brain) in humans. In thyroid carcinomas, NGAL is strongly induced by NF-kB, an important factor involved both in tumor growth and in the link between chronic inflammation and neoplastic development. Thus, Lipocalin-2 (LCN2/NGAL) has been implicated in a variety of processes including cell differentiation, proliferation, survival and morphogenesis. Synonym: Neutrophil gelatinase-associated lipocalin, NGAL, Lipocalin-2, SV-40-induced 24P3 protein, Siderocalin LCN2, p25, LCN2

Molecular Weight: 22.3 kDa

NCBI Accession: [NP_032517](#)

Pathways: [Cellular Response to Molecule of Bacterial Origin](#), [Transition Metal Ion Homeostasis](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

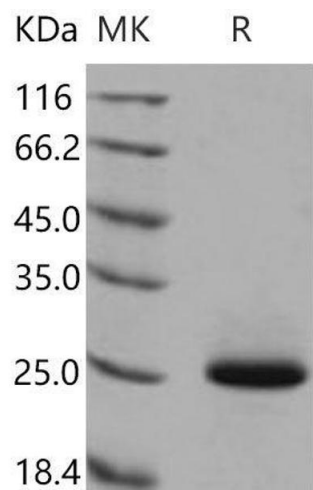
Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile PBS, pH 7.4

Handling

Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Images



Western Blotting

Image 1.