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Datasheet for ABIN7321297

Lipocalin 2 Protein (LCN2) (His tag)

Overview

Quantity:	100 µg
Target:	Lipocalin 2 (LCN2)
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Lipocalin 2 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Rat NGAL/LCN2 Protein (His Tag)
Sequence:	Gln21-Asn198
Characteristics:	A DNA sequence encoding the Rat NGAL/LCN2 (P30152-1) (Gln21-Asn198) was expressed with a polyhistidine tag at the N-terminus.
Purity:	>90 % as determined by reducing SDS-PAGE.

Target Details

Target:	Lipocalin 2 (LCN2)
Alternative Name:	NGAL/LCN2 (LCN2 Products)
Background:	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

Target Details

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: 24p3,25 kDa alpha 2 microglobulin related subunit of MMP9,Alpha 2 microglobulin related protein,HGNC:6526,Lcn 2,Lipocalin-2,Migration stimulating factor inhibitor,MSFI ,Oncogene 24p3,p25,Siderocalin,siderocalin LCN2,SV40 induced 24P3 protein,Uterocalin,Neutrophil Gelatinase Associated Lipocalin

Molecular Weight: 20.5kDa

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

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.