Datasheet for ABIN7520292

Lipocalin 2 Protein (LCN2)

Go to Product page

Overview

Quantity:	500 µg
Target:	Lipocalin 2 (LCN2)
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Purpose:	Recombinant Human Lipocalin-2/NGAL/LCN2 Protein
Sequence:	QDSTSDLIPA PPLSKVPLQQ NFQDNQFQGK WYVVGLAGNA ILREDKDPQK MYATIYELKE DKSYNVTSVL FRKKKCDYWI RTFVPGCQPG EFTLGNIKSY PGLTSYLVRV VSTNYNQHAM VFFKKVSQNR EYFKITLYGR TKELTSELKE NFIRFSKSLG LPENHIVFPV PIDQCIDG
Specificity:	Gln21-Gly198
Purity:	> 97 % by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	< 1.0 EU/µg of the protein by 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 human Lipocalin-2. Recombinant human Lipocalin-2 can bind >10625 µM of Fe(DHBA)3.

Target Details

Target:	Lipocalin 2 (LCN2)
Alternative Name:	Lipocalin-2/NGAL/LCN2 (LCN2 Products)
Background:	Description: Lipocalin-2 (LCN2), also known as neutrophil gelatinase-associated lipocalin (NGAL), is a 25 kDa protein belonging to the lipocalin superfamily. Members of this family transport small hydrophobic molecules such as lipids, steroid hormones and retinoids. The protein is a neutrophil gelatinase-associated lipocalin and plays a role in innate immunity by limiting bacterial growth as a result of sequestering iron-containing siderophores. The presence of this protein in blood and urine is an early biomarker of acute kidney injury. This protein is thought to be be involved in multiple cellular processes, including maintenance of skin homeostasis, and suppression of invasiveness and metastasis. Mice lacking this gene are more susceptible to bacterial infection than wild type mice. Name: 24p3, MSFI, NGAL, p25,LCN2,MSFI,NGAL,p25
Gene ID:	3934
UniProt:	P80188
Pathways:	Cellular Response to Molecule of Bacterial Origin, Transition Metal Ion Homeostasis

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1 % BSA, 5 % HSA, 10 % FBS or 5 % Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.
Buffer:	Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.
Storage:	-20 °C,-80 °C
Storage Comment:	Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week.