

Human CellExp Lipocalin-2 / LCN2, human recombinant protein

NGAL, LCN2, Lipocalin-2, 24p3, MSFI, Siderocalin; Oncogene 24p3; Neutrophil Gelatinase-associated Li Catalog # PBV11081r

Specification

Human CellExp Lipocalin-2 / LCN2, human recombinant protein - Product info

Primary Accession P80188

Calculated MW

This protein is fused with 6×his tag at
C-terminal and has a calculated MW of 22

kDa. The predicted N-terminal is Gln 21.

DTT-reduced protein migrates as 23-25

kDa. KDa

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Gene ID 3934
Gene Symbol LCN2

Other Names

NGAL, LCN2, Lipocalin-2, 24p3, MSFI, Siderocalin; Oncogene 24p3; Neutrophil

Gelatinase-associated Lipocalin; NGAL.

Gene Source
Source
Assay&Purity
Human
HEK293 cells
SDS-PAGE; ≥95%

Assay2&Purity2 N/A; Recombinant Yes

Results 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 rhLCN2. rhLCN2 can bind $>1.5 \mu M$ of Fe(DHBA)3.

Target/Specificity

Lipocalin-2

Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 μ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format

Lyophilized

Storage

-20°C; Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

Human CellExp Lipocalin-2 / LCN2, human recombinant protein - Protocols



Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Human CellExp Lipocalin-2 / LCN2, human recombinant protein - Images

Human CellExp Lipocalin-2 / LCN2, human recombinant protein - Background

Lipocalin-2 (LCN2), also known as oncogene 24p3 or neutrophil gelatinase-associated lipocalin (NGAL), MSFI, The binding of lipocalin-2 to bacterial siderophores is important in the innate immune response to bacterial infection. Upon encountering invading bacteria the toll-like receptors on immune cells stimulate the synthesis and secretion of lipocalin-2. Secreted lipocalin-2 then limits bacterial growth by sequestering iron-containing siderophores. Lipocalin-2 also functions as a growth factor. LCN2 is strongly upregulated during inflammation and is upregulated by interleukin 1 (but not TNF alpha) in humans. There are indications that some forms of acne could be caused due to the gene not being transcribed, and that Isotretinoin corrects this. NFAT3 (NFATc4) NFAT by blocking the expression of LCN2 inhibits breast carcinoma cell motility. Recent studies have revealed that NGAL plays an important role in the physiopathology of chronic myeloid leukaemia (CML) mediated by BCR-ABL.

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Bundgaard J.R., et al. Biochem. Biophys. Res. Commun. 202:1468-1475(1994). Cowland J.B., et al. Genomics 45:17-23(1997). Ota T., et al. Nat. Genet. 36:40-45(2004). Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Humphray S.L. et al. Nature 429:369-374(2004).