RP01823

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Recombinant Human Lipocalin-2/NGAL/LCN2 Protein

Catalog No.: RP01823 Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	3934	P80188

Tags
C-hFC

Synonyms
p25; 24p3; MSFI; NGAL;Lipocalin-2;LCN2

Product Information

Source
HEK293 cells

Purification
> 95% by SDS-PAGE.

Endotoxin
< 0.01EU/μg

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution
Centrifμge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex 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.

Contact

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Background

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.

Basic Information

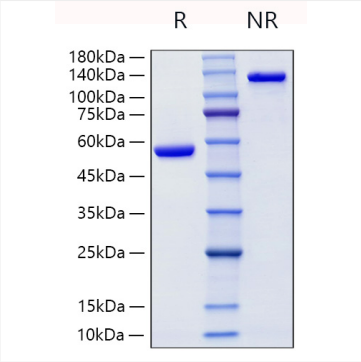
Description
Recombinant Human Lipocalin-2/NGAL/LCN2 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gln21-Gly198) of human Lipocalin-2/NGAL/LCN2 (Accession #NP_005555.2) fused with a hFc tag at the C-terminus.

Bio-Activity
1、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 human Lipocalin-2 can bind >2.84 μM of Fe(DHBA)3.

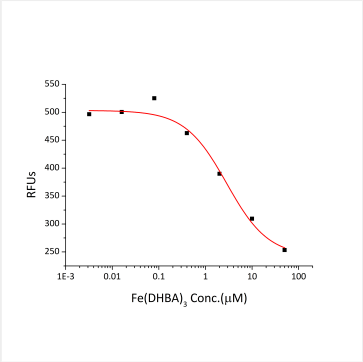
Storage
Store at -20℃.Store the lyophilized protein at -20℃ to -80 ℃ up to 1 year from the date of receipt.
After reconstitution, the protein solution is stable at -20℃ for 3 months, at 2-8℃ for up to 1 week.
Avoid repeated freeze/thaw cycles.

* For your safety and health, please wear a lab coat and disposable gloves when handling.

Validation Data



Recombinant Human Lipocalin-2/NGAL/LCN2 Protein was determined by SDS-PAGE under reducing (R) and non-reducing (NR) conditions.



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 human Lipocalin-2 can bind >2.84 μM of Fe(DHBA)3.