

Human NGAL/Lipocalin-2 Protein

Cat. No. NGL-HM102

Description

| | |
|-------------------------|---|
| Source | Recombinant Human NGAL/Lipocalin-2 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln21-Gly198. |
| Accession | P80188-1 |
| Molecular Weight | The protein has a predicted MW of 21.64 kDa. Due to glycosylation, the protein migrates to 25-30 kDa based on Bis-Tris PAGE result. |
| Endotoxin | Less than 1EU per μg by the LAL method. |
| Purity | > 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC |

Formulation and Storage

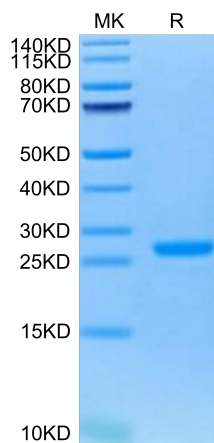
| | |
|-----------------------|---|
| Formulation | Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water. |
| Storage | -20 to -80°C for 24 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

Background

Acute kidney injury (AKI) is one of the most common complications of various serious conditions, and early diagnosis is therefore critical for the treatment of AKI. Recent evidence demonstrates that neutrophil gelatinase-associated lipocalin (NGAL) is closely associated with AKI. Several experimental and clinical studies have shown that the expression of urine and serum NGAL increases significantly in AKI. NGAL shows potential to be a new effective early biochemical marker of AKI. Further studies are needed to confirm the significant advantages of NGAL in the diagnosis of early AKI and its value in clinical applications.

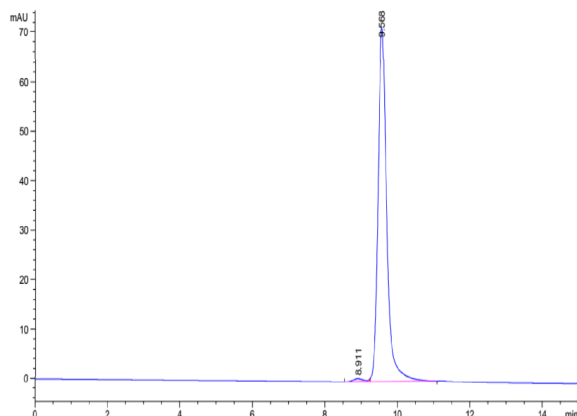
Assay Data

Bis-Tris PAGE



Human NGAL on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



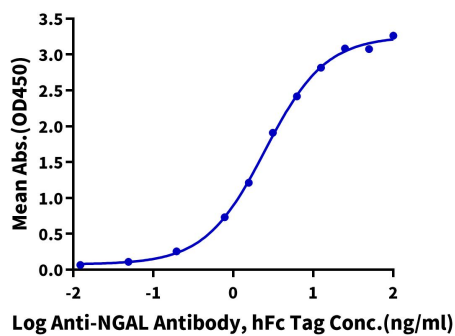
The purity of Human NGAL is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human NGAL, His Tag ELISA

0.1µg Human NGAL, His Tag Per Well



Immobilized Human NGAL, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Anti-NGAL Antibody, hFc Tag with the EC50 of 2.5ng/ml determined by ELISA (QC Test).