

Human NGAL/Lipocalin-2 Protein

Cat. No. NGL-HM201

Description

Source	Recombinant Human NGAL/Lipocalin-2 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Gln21-Gly198.
Accession	P80188-1
Molecular Weight	The protein has a predicted MW of 47.2 kDa. Due to glycosylation, the protein migrates to 48-52 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

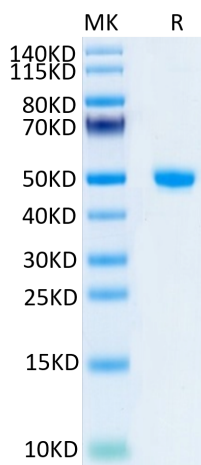
Formulation	Lyophilized from 0.22µm filtered solution in 50mM MES,150mM NaCl (pH 6.5). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in 50mM MES,150mM NaCl (pH 6.5).
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days 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

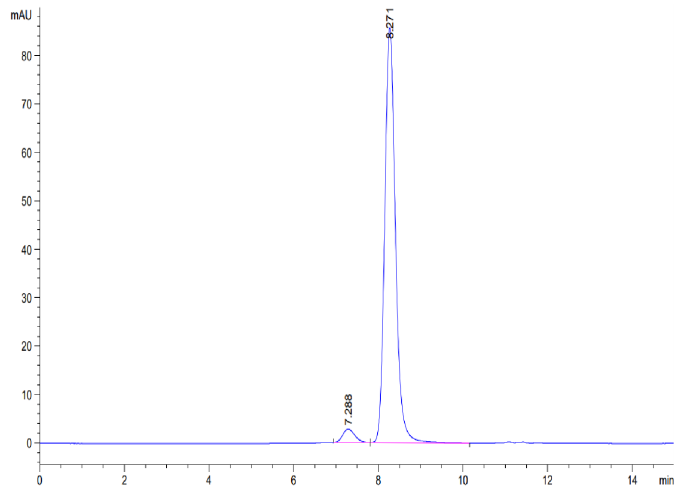
Tris-Bis PAGE



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

SEC-HPLC

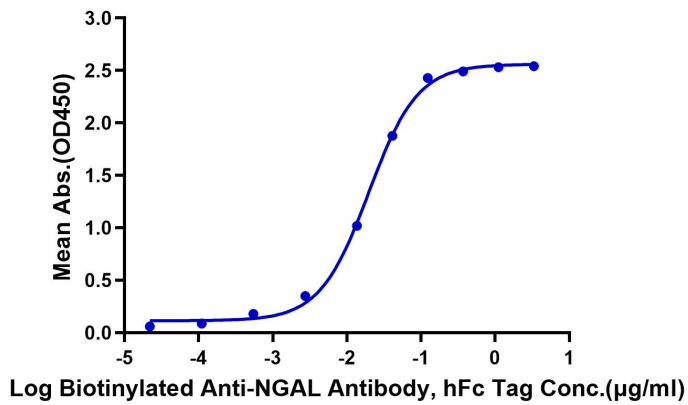
Assay Data



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

ELISA Data

Human NGAL, hFc Tag ELISA
0.05µg Human NGAL, hFc Tag Per Well



Immobilized Human NGAL, hFc Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Anti-NGAL Antibody, hFc Tag with the EC50 19.7ng/ml determined by ELISA.