Data Sheet (Cat.No.TMPK-01289)

NGAL/Lipocalin-2 Protein, Cynomolgus, Recombinant (His)

General Information

Synonyms:	Siderocalin LCN2;Oncogene 24p3;Lipocalin-2;p25;MSFI;NGAL
Protein Construction:	Gln21-Gly198
Species:	Cynomolgus
Expression Host:	HEK293 Cells
Accession:	XP_005580845.3
Molecular Weight:	21.51 kDa (predicted). Due to glycosylation, the protein migrates to 25-30 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Immobilized Cynomolgus NGAL, His Tag at 0.2μg/ml (100μl/Well) on the plate. Dose response curve for Anti-NGAL Antibody, hFc Tag with the EC50 of 11ng/ml determined by ELISA.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1 EU/μg by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein 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.

Reference

Shang W, Wang Z. The Update of NGAL in Acute Kidney Injury. Curr Protein Pept Sci. 2017;18(12):1211-1217. doi: 10.2174/1389203717666160909125004. PMID: 27634444.