

Recombinant Human NGAL

Catalog No: CH31

Description	Recombinant Human Neutrophil gelatinase-associated lipocalin is produced by our E.coli expression system and the target gene encoding Gln21-Gly198 is expressed with a 6His tag at the C-terminus.
Expression System	E.coli
Alternative name	Neutrophil gelatinase-associated lipocalin; NGAL; 25 kDa alpha-2-microglobulin-related subunit of MMP-9; Lipocalin-2; Oncogene 24p3; Siderocalin LCN2; p25; HNL; NGAL
Accession No.	P80188
Quality Control	Purity: greater than 95% as determined by reducing SDS-PAGE. Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation	Supplied as a 0.2 μm filtered solution of PBS, 50% glycerol, pH7.4.
Shipping	The product is shipped on dry ice pack. Upon receipt, store it immediately at the temperature listed below.
Storage	Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Background	Neutrophil gelatinase-associated lipocalin(LCN2) is a secreted protein and belongs to the calycin superfamily. This protein is released from injured tubular cells after various damaging stimuli, is already known by nephrologists as one of the most promising biomarkers of incoming Acute Kidney Injury (AKI). Recent evidence also suggests its role as a biomarker in a variety of other renal and non-renal conditions. Moreover, recent studies seem to suggest a potential involvement of this factor also in the genesis and progression of chronic kidney diseases. NGAL is the first known mammalian protein which specifically binds organic molecules called siderophores, which are high-affinity iron chelators. NGAL, first known as an antibacterial factor of natural immunity, and an acute phase protein, is currently one of the most interesting and enigmatic proteins involved in the process of tumor development. acting as an intracellular iron carrier and protecting MMP9 from proteolytic degradation, NGAL has a clear pro-tumoral effect, as has already been observed in different tumors (e.g. breast, stomach, oesophagus, brain) in humans. In thyroid carcinomas, NGAL is strongly induced by NF-κB, an important factor involved both in tumor growth and in the link between chronic inflammation and neoplastic development. Thus, Lipocalin- 2 (LCN2/NGAL) has been implicated in a variety of processes including cell differentiation, proliferation, survival and morphogenesis.

SDS-PAGE

