

PRODUCT NAME **Recombinant human monomer NGAL (rhNGAL)**
Recombinant protein

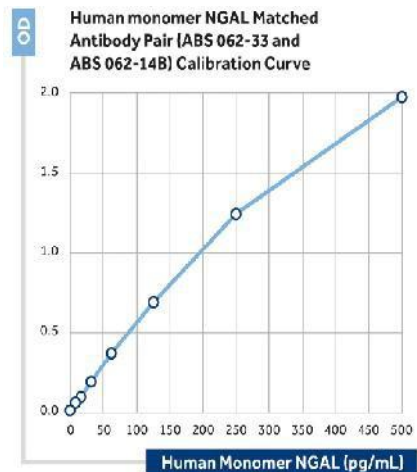
PRODUCT NO. **SP001RA**

PRESENTATION Production: E. coli
Source: Full length amino acid sequence
Content: 1 mL, 1000 pg/mL +/-15%
Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.14 M NaCl, 0.5% BSA; 0.5% Tween 20; 0.0016% Phenol red; 0.1% Proclin 950
Storage: 2-8°C

PREPARATION This product is purified full length recombinant protein without any tags, produced from E. coli

APPLICATION ELISA
This antigen is well suited as a standard in human NGAL quantifying assays, such as ELISA.

The figure illustrates the calibration curve of a sandwich assay with ABS 062-33 as the capture antibody and ABS 062-14B as the biotinylated detection antibody (1).



BACKGROUND Neutrophil gelatinase-associated lipocalin (NGAL; also called lipocalin 2, siderocalin and neutrophil lipocalin) is a member of the lipocalin family of proteins which bind and transport small lipophilic molecules. NGAL is released by activated neutrophils and occurs as 25-kDa glycosylated single protein chain monomers, which form dimers and small amounts of higher oligomers, as well as complexes with matrix metalloproteinase 9 (MMP-9; gelatinase B) (2). Low level expression of NGAL in a variety of epithelia may be increased in inflammation or cancers (3). Expression of NGAL in the kidney is dramatically increased by acute kidney injury.

REFERENCES

1. Bangert et al (2013) The Monomer is the Major Form of NGAL in Urine and Plasma in Severe Sepsis J Am Soc Nephrol 24:368A
2. Kjeldsen L et al (1993) Isolation and primary structure of NGAL, a novel protein associated with human neutrophil gelatinase. J Biol Chem 268:10425-10432.
3. Nielsen BS et al (1996) Induction of NGAL synthesis in epithelial cells of human colorectal neoplasia and inflammatory bowel diseases. Gut 38:414-420

CONDITIONS

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