

**Anti-neutrophil gelatinase-associated lipocalin (human, NGAL)
Mouse monoclonal antibody**

Subclass: IgG1/k

PRODUCT NO.

ABS 038-15

Clone: 15

PRESENTATION

Preparation: Protein-A/G purified
 Content: Available in 200 µL and 1 mL volumes, 1 mg/mL
 Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15 mM sodium azide
 Storage: In the dark at 4-8°C

ANTIGEN

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) (1). Low level expression of NGAL in a variety of epithelia may be increased in inflammation or cancers (2). Expression of NGAL in the kidney is dramatically increased by acute kidney injury (3).

IMMUNOGEN

Recombinant human NGAL adsorbed onto aluminum hydroxide gel

SPECIFICITY

ABS 038-15 binds human NGAL and does not cross-react with NGAL from other mammalian species tested

EPITOPE SPECIFICITY

Differs from those of HYB 211-02, HYB 211-05, ABS 038-04, ABS 038-14, ABS 038-23 and ABS 038-26

REACTIVITY

ABS 038-15 binds human NGAL in solution and coated onto a solid phase.

ABS 038-15 (as capture antibody) forms sandwich pairs with HYB 211-02, HYB 211-05, ABS 038-04, ABS 038-14, ABS 038-23 and ABS 038-26 (as biotinylated detection antibodies) for measuring human NGAL.

CULTURE MEDIUM

RPMI 1640 with 2-10% fetal calf serum

FUSION PARTNER

SP2mIL6

IMMUNIZATION

Female NMRIxBALB/c mice immunized by intraperitoneal injection

APPLICATION

Method	Usability	Dilution guideline	References
ELISA	Yes		
Immunoblotting	Yes	1/1000	
Immunohistochemistry	Not determined		

REFERENCES

- Kjeldsen L, Johnsen AH, Sengeløv H, Borregaard N (1993) Isolation and primary structure of NGAL, a novel protein associated with human neutrophil gelatinase. *J Biol Chem* 268:10425-10432.
- Nielsen BS, Borregaard N, Bundgaard JR, Timshel S, Sehested M, Kjeldsen L (1996) Induction of NGAL synthesis in epithelial cells of human colorectal neoplasia and inflammatory bowel diseases. *Gut* 38:414-420.
- Matthaeus T, Schulze-Lohoff E, Ichimura T, Weber M, Andreucci M, Park KM, Alessandrini A, Bonventre JV (2001) Co-regulation of neutrophil gelatinase-associated lipocalin and matrixmetalloproteinase-9 in the postschemic rat kidney. *J Am Soc Nephrol* 12:787A.

CONDITIONS

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.