

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

Subclass: IgG2b/k

PRODUCT NO.

**ABS 038-23**

PRESENTATION

Preparation: Protein-A purified

Content: Available in 200 µL and 1 mL volumes, 1 mg/mL

Solvent: 0.01 M phosphate buffer, pH 7.4, containing 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). The expression and release of NGAL from renal tubules are dramatically increased by ischemic or nephrotoxic injury (3).

IMMUNOGEN

Recombinant human NGAL adsorbed onto aluminum hydroxide gel

SPECIFICITY

 ABS 038-23 binds cynomolgus monkey (*Macaca fascicularis*) NGAL and cross-reacts with human NGAL.

ABS 038-23 binds human NGAL in complex with MMP-9.

EPITOPE SPECIFICITY

Not determined

REACTIVITY

 ABS 038-23 (as capture antibody) forms a sandwich pair with HYB 211-02 (as biotinylated detection antibody) for measuring cynomolgus monkey (*Macaca fascicularis*) and human NGAL.

ABS 038-23 binds human NGAL in solution.

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	1/30,000	
Immunoblotting	Not determined		
Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on recombinant NGAL coated directly at 0.8 µg/mL. Users should determine the optimal dilutions for their own purposes.

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.
- Mishra J, Ma Q, Prada A, Mitsnefes M, Zahedi K, Yang J, Barasch J, Devarajan P (2003) Identification of neutrophil gelatinase-associated lipocalin as a novel early urinary biomarker for ischemic renal injury. *J Am Soc Nephrol* 14:2534-2543.

**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.