

Anti-NGAL (mouse, neutrophil gelatinase-associated lipocalin)
Rat monoclonal antibody

Subclass: IgG1/k

PRODUCT NO.

ABS 043-29

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, containing 0.5 M NaCl and 15 mM sodium azide

Storage: In the dark at 4-8°C

ANTIGEN

Mouse neutrophil gelatinase-associated lipocalin (NGAL; also called lipocalin 2, 24p3, SIP24, uterocalin and siderocalin) is a member of the lipocalin family of proteins which bind and transport small lipophilic molecules. 24p3 was observed to be dramatically upregulated in kidney cell cultures infected with SV40 (1) and subsequently identified as a lipocalin (2). Unlike human NGAL, it is an acute phase protein upregulated in the liver (3), but like its mammalian homologues it is upregulated and secreted by the kidney in response to ischemic or nephrotoxic injury (4). It is also upregulated in the involuting uterus and mammary gland (5).

IMMUNOGEN

Recombinant mouse NGAL adsorbed onto aluminum hydroxide gel

SPECIFICITY

ABS 043-29 binds NGAL in mouse serum

EPI TOPE SPECIFICITY

Not determined

REACTIVITY

ABS 43-29 binds free mouse NGAL in solution.

ABS 043-29 forms an antibody pair for sandwich ELISA with ABS 043-10. It is recommended to use ABS 043-10 as capture antibody and biotinylated ABS 043-29 as detection antibody.

CULTURE MEDIUM

RPMI 1640 with 10% fetal calf serum

FUSION PARTNER

SP2mIL6.

IMMUNIZATION

Female NMRIxBALB/c mice immunized by intraperitoneal injections

APPLICATION

Method	Usability	Dilution guideline	References
ELISA	Yes	1/4000	
Immunoblotting	Not determined		
Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on use as detection antibody for antigen coated at 1 µg/ml. Users should determine the optimal dilutions for their own purposes.

REFERENCES

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2. Flower DR, North AC, Attwood TK (1991) Mouse oncogene protein 24p3 is a member of the lipocalin protein family. *Biochem Biophys Res Commun* 180:69-74.
3. Liu Q, Nilsen-Hamilton M (1995) Identification of a new acute phase protein. *J Biol Chem* 270:22565-22570.
4. 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.
5. Ryon J, Bendickson L, Nilsen-Hamilton M (2002) High expression in involuting reproductive tissues of

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.

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