

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

Subclass: IgG1/k

PRODUCT NO.

ABS 039-08

Clone: 8

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

Rat lipocalin-2 is also called rat NGAL as it is the ortholog of human neutrophil gelatinase-associated lipocalin (NGAL). Rat NGAL is a 25-kDa alpha 2-microglobulin-related protein or neu-related lipocalin. It is expressed by neutrophils and various epithelial cells, including cells of the renal proximal tubules. It is involved in physiological processes such as the binding of siderophore iron and tissue growth and regeneration. It is upregulated in a variety of pathological situations including infection, inflammation, ischemia-reperfusion and in certain adenocarcinomas.

IMMUNOGEN

Recombinant rat NGAL precursor adsorbed onto aluminum hydroxide gel

SPECIFICITY

ABS 039-08 binds rat NGAL and shows no cross-reaction with human NGAL.

EPITOPE SPECIFICITY

Not determined

REACTIVITY

ABS 039-08 binds free rat NGAL in solution. ABS 039-08 (as capture antibody) forms a sandwich ELISA pair with ABS 039-32 (as biotinylated detection antibody) for measuring rat NGAL, giving a detection limit of 0.012 ng/mL in an unoptimized buffer assay.

CULTURE MEDIUM

RPMI 1640 with 10% fetal calf serum

FUSION PARTNER

Sp2/mIL-6 (LGC Promochem, ATCC # CRL-2016)

IMMUNIZATION

NMRI x BALB/c mice immunized by intraperitoneal injection

APPLICATION

Method	Usability	Dilution guideline	References
ELISA	Yes	1/125	
Immunoblotting	Not determined		
Immunohistochemistry	Yes		2

The dilution guideline for ELISA is based on use as detection antibody for antigen coated at 0.1-1 µg/ml. Users should determine the optimal dilutions for their own purposes.

REFERENCES

- 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* 14:2534-43.
- Zhang J, Ohm J, Vaidya V, Espandiari P, Knapp A, Goering P, Brown R, Bonventre J, Herman E (2009) NGAL Expression in Kidney of Spontaneously Hypertensive Rats (SHR) Treated with Doxorubicin (DXR) Alone or Combined with Dexrazoxane (DRZ) (Presented at Tox Expo 2009)

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.