

Size	Price
100 µl of serum	\$300 (CAN)

Polyclonal rabbit anti-rat NTPDase2 antibody

NTPDase 2 is also known as CD39L1, nucleoside triphosphate diphosphohydrolase-2, ecto-ATPase, ENTPD2

Name: rN2-6_L

Application¹

	Yes	Dilution	No	Not tested
Western blot (non-reduced) [§]	+	1:500		
Western blot (reduced)			×	
Immunohistochemistry*	+	1:500		
Flow cytometry	+	1:80		
ELISA				×
Immunoprecipitation				×

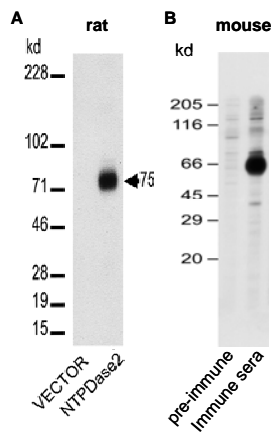
[§] Thiol-reactive reagents (e.g. β-mercaptoethanol, DTT) must be avoided as they destroy the epitope recognized by the antibody.

* Cryosection and acetone fixation.

Cross reactivity

In Western blot and immunohistochemistry, this antibody reacts with mouse NTPDase2 but does not cross react with human NTPDase2 in Western blot.

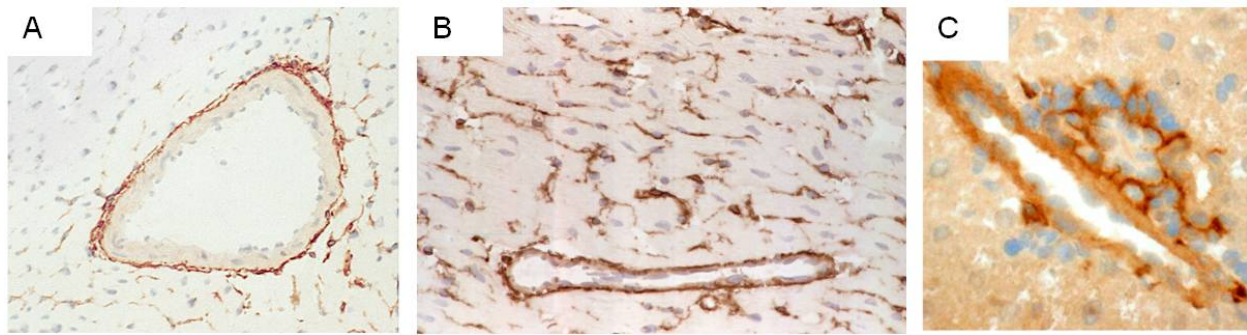
Western Blot¹



A: Protein samples (5 µg) from a lysate from COS-7 cells transiently transfected with the rat NTPDase2 cDNA vector or empty vector (negative control), were loaded on a 10% acrylamide SDS-gel under non-reducing conditions. Resolved proteins were transferred to an Immobilon-P membrane and incubated with the anti-rat NTPDase2 antibody².

B: Protein samples (6 µg) from a lysate from COS-7 cells transiently transfected with a plasmid encoding for mouse NTPDase2 were loaded on a NuPAGE® Novex® Bis-Tris gel under non-reducing conditions, transferred to an Immobilon-P membrane and incubated with the anti-rat NTPDase2 antibody or preimmune serum.

Immunohistochemistry¹



A: Immunohistological localization of NTPDase2 in mouse cardiac vasculature. A strong signal is observed in the adventitial layer of a muscularized vessel².

B: Immunohistological localization of NTPDase2 in mouse cardiac microvasculature. A positive reaction is detected in capillaries (on pericytes), and in the adventitial layer of other vessels².

C: Immunohistological localization of NTPDase2 in rat liver. NTPDase2 is present at the external face of large blood vessels and in periductular area³.

In all panels, nuclei are stained with hematoxylin (blue).

Storage

To avoid excessive freeze-thaw cycles, a small amount can be kept at 4°C for generally up to one year. A better method consists to dilute the antibody 10 times in one part of 145 mM NaCl, 1% BSA, 10 mM Tris (pH 7.4), and one part of glycerol (for a final concentration of 50% v/v) and to keep it at -20°C (note that 50% glycerol solutions freeze at about -30°C). For long-term storage, freeze samples directly at -80°C.

Reference to cite in your publication (paper where these antibodies were characterized)

This antibody was obtained from ectonucleotidases-ab.com and its specificity was characterized in:

Sévigny J, Sundberg C, Braun N, Guckelberger O, Csizmadia E, Qawi I, Imai M, Zimmermann H, Robson SC. Differential catalytic properties and vascular topography of murine nucleoside triphosphate diphosphohydrolase 1 (NTPDase1) and NTPDase2 have implications for thromboregulation. *Blood*. 2002; 99(8):2801-2809.

Few other references where these antibodies were used

- Heine P, Braun N, Sévigny J, Robson SC, Servos J, Zimmermann H. The C-terminal cysteine-rich region dictates specific catalytic properties in chimeras of the ectonucleotidases NTPDase1 and NTPDase2. *European Journal of Biochemistry*. 2001; 268(2):364-373.

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- Fausther M, Lecka J, Soliman E, Kauffenstein G, Pelletier J, Sheung N, Dranoff JA, Sévigny J. Co-expression of ecto-5'-nucleotidase/CD73 with specific NTPDases differentially regulates adenosine formation in the rat liver. *Am J Physiol Gastrointest Liver Physiol*. 2012; 302(4):G447-459.
- Vieira C, Magalhaes-Cardoso MT, Ferreirinha F, Silva I, Dias AS, Pelletier J, Sévigny J, Correia-de-Sa P. Feed-forward inhibition of CD73 and upregulation of adenosine deaminase contribute to the loss of adenosine neuromodulation in postinflammatory ileitis. *Mediators Inflamm*. 2014; 254640.

1: Protocols and experimental conditions are available at <http://www.ectonucleotidases-ab.com/Protocols.php>.

2: Figure taken from Sévigny et al. Differential catalytic properties and vascular topography of murine nucleoside triphosphate diphosphohydrolase 1 (NTPDase1) and NTPDase2 have implications for thromboregulation. *Blood*. 2002. 99(8): 2801-9. © the American Society of Hematology. doi:10.1182/blood.V99.8.2801.

3: Figure taken from Fausther et al. (2007) *Gastrointest Liver Physiol, Am Physiol Soc, used with permission*.