

Size	Price
100 µl of serum	\$200 (CAN)

Polyclonal rabbit anti-rat NTPDase1/CD39 antibodies

Name: rN1-6_L(I₄,I₅)

Applications¹

	Yes	Dilution	No	Not tested
Western blot (non-reduced) [§]	+	1:3000		
Western blot (reduced)			×	
Immunohistochemistry [*]	+	1:1000		
Flow cytometry				×
ELISA				×
Immunoprecipitation				×

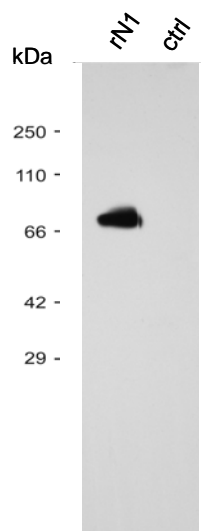
§ Thiol-reactive reagents (e.g. β-mercaptoethanol, DTT) must be avoided as they destroy the epitope recognized by the antibody.

* Cryosection and acetone fixation.

Cross-reactivity

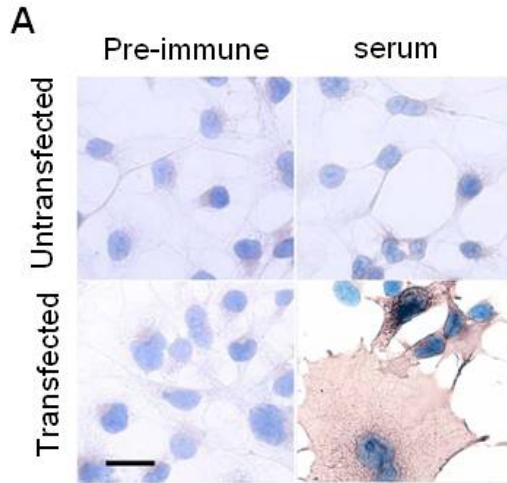
In Western blot, rN1-6_LI₅ cross-reacts with mouse NTPDase1 but not with human NTPDase1.

Western Blot¹



Protein samples (6 µg) from a lysate from COS-7 (ctrl) or from COS-7 cells transiently transfected with a plasmid encoding for rat NTPDase1 were loaded on a NuPAGE® Novex® Bis-Tris 4-12% gel under non-reducing conditions, transferred to an Immobilon-P membrane and incubated with rN1-6_LI₄. A specific band is detected only in sample from cells expressing rat NTPDase1.

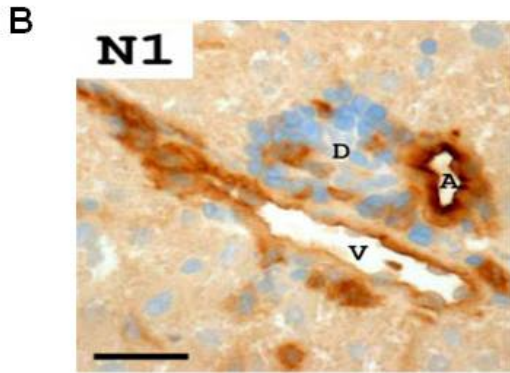
Immuno(cyto/histo)chemistry¹



A: Immunocytochemistry of untransfected COS-7 cells or transfected with a plasmid encoding rat NTPDase1 both incubated with rN1-6_L or preimmune serum. A strong signal is observed only with the antiserum in cells expressing rat NTPDase1. No signal is detected in any of the control cells.

B: A rat liver section incubated with rN1-6_L displays a strong signal in blood vessels, in both, endothelial and smooth muscle cells.

Taken from Fausther et al. (2007) *Am J Physiol Gastrointest Liver Physiol*, 292(3), G785-795, Am Physiol Soc, and used with permission.



In both 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:

Fausther M, Lecka J, Kukulski F, Lévesque SA, Pelletier J, Zimmermann H, Dranoff JA, Sévigny J. Cloning, purification and identification of the liver canalicular ecto-ATPase as NTPDase8. *Am J Physiol Gastrointest Liver Physiol*. 2007; 292(3):G785-795.

Few other references where these antibodies were used

- Kittel A, Sperlagh B, Pelletier J, Sévigny J, Kirley TL. Transient changes in the localization and activity of ecto-nucleotidases in rat hippocampus following lipopolysaccharide treatment. *Int J Dev Neurosci.* 2007; 25(5):275-282.
- Cognato GP, Vuaden FC, Savio LE, Bellaver B, Casali E, Bogo MR, Souza DO, Sévigny J, Bonan CD. Nucleoside triphosphate diphosphohydrolases role in the pathophysiology of cognitive impairment induced by seizure in early age. *Neuroscience.* 2011; 180:191-200.
- 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.
- Gonzalez DA, Egado P, Balcarcel NB, Hattab C, Barbieri van Haaster MM, Pelletier J, Sévigny J, Ostuni MA. Rat submandibular glands secrete nanovesicles with NTPDase and 5'-nucleotidase activities. *Purinergic signalling.* 2015; 11(1):107-116.