ADVANCED TARGETING SYSTEMS

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Anti-Anti-Dopamine
RABBIT POLYCLONAL

Catalog Number: AB-T019
Quantity: 50 microliters
Format: Lyophilized and reconstituted with deionized water / 50% glycerol
Host: Rabbit
Isotype: IgG
Immunogen: polyclonal and monoclonal anti-conjugated dopamine antibodies (Ab1)

Specificity and Preparation:
Anti-idiotypic antibodies internal images (Ab2) are developed in order to mimic the physiological activity of biomolecules. This antibody targets dopamine receptor, binding site of polyclonal or monoclonal anti-conjugated dopamine antibodies. Antiserum previously preabsorbed on protein carriers and purified by ammonium sulfate precipitation.

Using idiotypic antibody responses, specificity was performed with an ELISA test by competition experiments with the following compounds:

COMPOUND	CROSS REACTIVITY §
Anti-conjugated dopamine antibody	1
Anti-conjugated L-DOPA antibody	<1/50,000

Using competition experiments in ELISA tests internal image Ab2 was evaluated by competiton experiments between protein carrier conjugate coated well plates and Ab1 previously preincubated with Ab2 or respective conjugate. For example, anti-dopamine Ab1 were previously with Ab2 and tested on well coated with glutamate conjugates, anti-L-DOPA were previously preincubated with anti-anti-dopamine and tested on well plates coated with L-DOPA-protein carrier.

Usage and Storage:
Applications include ELISA (1/1,000-1/2,000) and immunohistochemistry / immunocytochemistry[4,5], and functional[6]. Store the antibody at 4°C for one month or -20°C in undiluted aliquots for up to one year. Avoid repeated freezing and thawing. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

Available Control(s): Polyclonal or Monoclonal Anti-Conjugated Dopamine

References:
1. Bona CA (1984) Parallel sets and the internal image of antigen within the idiotypic network. Fed Proc 43 (10):2558-2562.
2. Pillet D, Paon M, Vorobiev II, Gabibov AG, Thomas D, Friboulet A (2002) Idiotypic network mimicry and antibody catalysis: lessons for the elicitation of efficient anti-idiotypic protease antibodies. J Immunol Methods 269(1-2):5-12.
3. Mons N, Dubourg P, Messier C, Chiavaroli C, Calas A, Geffard M (1991) Polyclonal anti-idiotypic antibodies as internal images of dopamine. Applications for biochemical and morphological studies of DA receptors in the rat brain. J Hirnforsch 32(5):617-625.
4. Vuvan T, Geffard M, Denis P, Simon A, Nguyen-Legros J (1993) Radioimmunoligand characterization and immunohistochemical localization of dopamine D2 receptors on rods in the rat retina. Brain Res 614:57-64.
5. Vanhems E, Delbos M, Geffard M, Viellemaringe J (1994) Detection of putative dopamine receptors in neurites outgrowing from locust central nervous system explants using anti-idiotypic dopamine antibodies. Neuroscience 58(3):649-655.
6. Mrabet O, Messier C, Mons N, Destrade C, Geffard M (1991) Locomotor bias produced by intra-accumbens and intracaudate injection of polyclonal dopamine anti-idiotypic antibodies. J Hirnforsch 32 (5):627-633.

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