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Anti-Conjugated L-Glutamate MOUSE MONOCLONAL

Catalog Number: AB-T12
Quantity: 50 microliters
Format: Lyophilized and reconstituted with deionized water / 50% glycerol
Host: Mouse
Isotype: IgM, Kappa
Immunogen: Synthetic L-glutamate conjugated to bovine serum albumin

Specificity and Preparation:

Monoclonal antibody was obtained after BALB/c mouse immunization with the conjugates: L-Glutamate-Glutaraldehyde-carrier proteins and hybridization of spleen cells with the myeloma cell line SP2/O/Ag14. Ascites production was performed in BALB/c mice. The ascites fluid was purified by ammonium sulfate precipitation and gel filtration.

This antibody targets conjugated L-glutamate. **This antibody does not recognize free L-glutamate.**

Using a conjugate L-glutamate-Glutaraldehyde-BSA, antibody specificity was performed with an ELISA test by competition experiments with the following compounds:

COMPOUND	CROSS REACTIVITY §
L-Glutamate-G-BSA	1
D-Glutamate-G-(Pc)	1/100
L-Aspartate-G-(Pc)	1/50,000
GABA-G-(Pc)	1/50,000

G = Glutaraldehyde, GABA = Gamma-Aminobutyric Acid, BSA = bovine serum albumin

§ L-Glutamate-G-BSA concentration/other conjugated amino acid concentration at half displacement.

Usage and Storage:

Applications include ELISA (1/1,000-1/5,000), immunocytochemistry, immunohistochemistry (1/1,000-1/5,000), immunoblotting (western blot 1/1,000-1/2,000). Fixation of tissue for use with these antibodies should be done with glutaraldehyde. The use of paraformaldehyde in conjunction with glutaraldehyde may improve staining results. 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): L-Glutamate-G-BSA

References:

1. Sinkevitch I, Farris SM, Strausfeld NJ (2001) Taurine-, aspartate- and glutamate-like immunoreactivity identifies chemically distinct subdivisions of Kenyon cells in the cockroach mushroom body. *J Comp Neurol* 439(3):352-367.
2. Chagnaud JL, Campistron G, Geffard M. (1989) Monoclonal antibody directed against glutaraldehyde conjugated glutamate and immunocytochemical applications in the rat brain. *Brain Res* 481:175-181.

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