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BM295 Monoclonal Antibody to Clathrin heavy chain - Purified

Alternate names: CLH17, CLTC, CLTCL2, Clathrin heavy chain on chromosome 17, KIAA0034, Membrane Vesicle Marker

Quantity: 0.1 mg

Background: Clathrin is a protein which assembles into a polyhedral network on the cell membrane as the membrane invaginates, forming a coated pit which is essential to endocytosis. Clathrin is composed of three polypeptides, a 180 kDa heavy chain and two 32-38 kDa light chains which combine to create a distinct three-legged triskelion. It is this morphology which allows Clathrin to form its unique polyhedral network.

Uniprot ID: P49951

NCBI: NP_776448

GeneID: 281080

Host / Isotype: Mouse / IgM

Recommended Isotype Controls: SM13P

Clone: CHC5.9

Immunogen: Coated vesicles (Clathrin) of Bovine brain.

Format:
State: Lyophilized purified IgM fraction.
Purification: Gel filtration
Reconstitution: Restore with 1 ml distilled water.

Applications:
Immunohistochemistry on Frozen Tissue: 1/10.
(When reconstituted, dilute further with PBS, pH 7.4).
Incubation Time: 1 h at RT.
Immunoblotting (Western): 1/100-1/500 (ECL).
Successful use in **Immunoprecipitation** was reported by some researchers. As this detection method has not been verified by Acris Antibodies, the application was deleted from the database. This does not necessarily exclude the use in such procedure.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: Clone CHC5.9 represents an excellent marker for detection of receptor mediated endocytosis (for review cf. e.g. Refs. 2 and 3).
Polypeptide Reacting: Mr 180 000 polypeptide (clathrin heavy chain) from coated vesicles of various tissues.
Structures and Tissues Specifically Detected:
Coated vesicles of different organs and tissues (eg brain, mammary gland, ovaries).
Reactivities on Cultured Cell Lines (tested so far):
HeLa, SV-40, RVF-SMC.

Species Reactivity: **Tested:** Human, Bovine, Pig, Rat and Amphibia.

Storage:

Store the antibody undiluted at 2-8°C.
Shelf life: one year from despatch.

General Readings:

1. Bruder G, Wiedenmann B. Identification of a distinct 9S form of soluble clathrin in cultured cells and tissues. Exp Cell Res. 1986 Jun;164(2):449-62. PubMed PMID: 3709679.
2. Hirst J and Robinson MS: Clathrin and adaptors. Biochim. Biophys. Acta 1404, 173-193 (1998).
3. Qualmann B, Kessels MM, Kelly RB. Molecular links between endocytosis and the actin cytoskeleton. J Cell Biol. 2000 Sep 4;150(5):F111-6. PubMed PMID: 10974009.