

## Monoclonal Antibody to Clathrin heavy chain - Purified

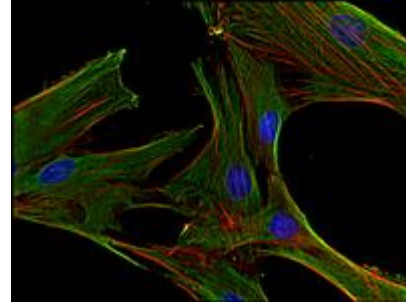
<b>Alternate names:</b>	CLH17, CLTC, CLTCL2, Clathrin heavy chain on chromosome 17, KIAA0034, Membrane Vesicle Marker
<b>Catalog No.:</b>	AM03115PU-N
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	Clathrin is a submembrane protein that polymerizes into coat-like lattices, which results in membrane invagination. The basic oligomers are composed of three clathrin heavy chain (180 kDa) and three light chain (30 kDa) subunits and the process of polymerization is dynamically regulated by the light chains. Interaction of clathrin with the plasma membrane is mediated by adaptor proteins (AP1-4) specific for different cellular compartments. Another proteins, such as endophilin, epsin and amphiphysin are involved in membrane invagination and clathrin rearrangements. Finally, dynamin functions at the fission stage of clathrin-mediated endocytosis.
<b>Uniprot ID:</b>	<a href="#">Q00610</a>
<b>NCBI:</b>	<a href="#">NP_004850</a>
<b>GeneID:</b>	<a href="#">1213</a>
<b>Host / Isotype:</b>	Mouse / IgM
<b>Clone:</b>	BF-06
<b>Format:</b>	<b>State:</b> Liquid Ig fraction <b>Purification:</b> Ion exchange chromatography; purity: > 95% (by SDS-PAGE) <b>Buffer System:</b> Tris buffered saline (TBS) with 15 mM sodium azide, approx. pH 8.0
<b>Applications:</b>	Flow Cytometry: 2-5 µg/ml. Positive control: human blood leukocytes. Immunoprecipitation. Western Blotting. Immunocytochemistry. ELISA. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	The antibody recognizes clathrin heavy chain, an ubiquitously expressed 180 kDa protein involved in receptor-mediated endocytosis. <b>Species:</b> Human, Porcine, Mouse, Rat, Bovine. Other species not tested.
<b>Storage:</b>	Store the antibody at 2 - 8 °C. Do not freeze. Shelf life: one year from despatch.

**For research and in vitro use only. Not for diagnostic or therapeutic work.**  
Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
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- General Readings:**
1. Smith CJ, Pearse BM. Clathrin: anatomy of a coat protein. Trends Cell Biol. 1999 Sep;9(9):335-8. PubMed PMID: 10461185.
  2. Szymkiewicz I, Shupliakov O, Dikic I. Cargo- and compartment-selective endocytic scaffold proteins. Biochem J. 2004 Oct 1;383(Pt 1):1-11. PubMed PMID: 15219178.
  3. Wilbur JD, Hwang PK, Brodsky FM. New faces of the familiar clathrin lattice. Traffic. 2005 Apr;6(4):346-50. PubMed PMID: 15752139.
  4. Macůrek L, Zíková M, Dráberová E, Dráber P. Monoclonal antibody BF-06 against the heavy chain of clathrin. Folia Biol (Praha). 2003;49(6):238-40. PubMed PMID: 14748440.

**Pictures:** Immunofluorescence staining of clathrin in human primary fibroblasts using anti-clathrin (BF-06; green). Actin cytoskeleton decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).



Immunofluorescence staining of clathrin in human HeLa cell line using anti-clathrin (BF-06; green). Actin cytoskeleton decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).

