

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Clathrin Heavy Chain 2/CHC22 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human CHC17 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Clathrin Heavy Chain 2/CHC22 Trp1521-Glu1640 Accession # P53675
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

CHC22 (clathrin heavy chain on chromosome 22; also Clathrin Heavy Chain 2, CHL-22, CLTCL1, and CLTD) is a 170-190 kDa member of the clathrin heavy chain family of molecules. It is expressed in striated (skeletal and cardiac) muscle and adipocytes. CHC22 appears to participate in glucose transport by interacting with GLUT4 and GGA2, thus contributing to the formation of the GLUT4 storage compartment. CHC22 forms homotrimers, but does not interact with clathrin light chains. Human clathrin heavy chain 2/CHC22 is 1640 amino acids (aa) in length. It contains an N-terminal domain that mediates protein-protein interactions (aa 2-479), a flexible linker region (aa 480-523), a distal segment (aa 524-634), a "proximal" region (aa 639-1640), and a trimerization domain that mediates the formation of a non-covalent structure (aa 1551-1640). Multiple utilized phosphorylation and acetylation sites exist. There are three potential splice forms. One possesses a seven aa substitution for aa 1620-1640, a second shows a deletion of aa 1479-1535, and a third contains a combination of the afore-mentioned variations. Over aa 1521-1640, human CHC22 shares 60% aa identity with canine CHC22 and 73% aa identity with human CHC17. In rodent, CHC22 is not expressed as it is represented by a pseudogene.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.