

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | 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.                                                                                                    |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human Clathrin Heavy Chain 2/CHC22<br>Trp1521-Glu1640<br>Accession # P53675                                                                                                                                                             |
| <b>Conjugate</b>          | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | 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

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