

# Recombinant Human Complement Component 2, Fc Chimera

Cat. No. C2-599H Lot. No. (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| <b>Product Overview</b> | Recombinant Human complement component 2 was produced in <i>Human Cells (HEK293)</i> , and fused with C-terminal his-tagged Fc region of human IgG1 at the C-terminus.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Description</b>      | <p>L1 cell adhesion molecule (L1CAM), also designated as CD171, is a transmembrane cell adhesion molecule belonging to the immunoglobulin superfamily, and has been implicated in a variety of processes integral to the development of the nervous system, including neuronal migration, neurite outgrowth, and axon fasciculation. It is primarily expressed on projection axons of the central nervous system and peripheral nervous system, as well as on a few nonneuronal cell types, such as Schwann cells and lymphocytes. The 1257 amino acid (aa) residue precursor protein contains an extracellular domain consisting of six Ig-like C2-type domains and five fibronectin-type III domains and highly conserved transmembrane and cytoplasmic domains. L1CAM interacts with a variety of ligands including axonin-1, CD9, neurocan and integrins, and it has been revealed that the RGD motif in the sixth Ig domain of L1CAM is a binding site for integrins, thus important for nuclear signaling. Disruption of L1CAM function causes three X-linked neurological syndromes, i.e. hydrocephalus, MASA syndrome (mental retardation, aphasia, shuffling gait and adducted thumbs) and spastic paraplegia syndrome. In addition, L1CAM is also overexpressed in a variety of human carcinomas and is associated with bad prognosis.</p> |

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|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Molecular Mass</b>       | The recombinant human CD171/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 1348 amino acids and predicts a molecular mass of 151KDa. As a result of glycosylation, the rh L1CAM/Fc monomer migrates as approximately 220-240KDa band in SDS-PAGE under reducing conditions. |
| <b>Predicted N Terminal</b> | Ile 20.                                                                                                                                                                                                                                                                                                    |
| <b>Endotoxin</b>            | <1.0EU per 1µg cytokine as determined by the LAL method.                                                                                                                                                                                                                                                   |
| <b>Formulation</b>          | Supplied as a 0.2m filtered solution of PBS, pH7.4.                                                                                                                                                                                                                                                        |
| <b>Reconstitution</b>       | Follow the instructions on the vial. Centrifuge the vial at 4 before opening to recover the entire contents.                                                                                                                                                                                               |
| <b>Purity</b>               | >95%, as determined by SDS-PAGE.                                                                                                                                                                                                                                                                           |
| <b>Stability</b>            | Samples are stable for up to twelve months from date of receipt -70°C.                                                                                                                                                                                                                                     |
| <b>Storage</b>              | Store it under sterile conditions at -70°C. It is recommended that the protein be aliquoted and be used as soon as possible. Avoid repeated freeze-thaw cycles.                                                                                                                                            |

## GENE INFORMATION

|                  |                                                                                                                                                                                        |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b> | C2 complement component 2 [ Homo sapiens ]                                                                                                                                             |
| <b>Synonyms</b>  | C2; complement component 2; CO2; DKFZp779M0311; C3/C5 convertase; complement component C2; Complement C2; complement component 2; EC 3.4.21.43; OTTHUMP00000029277; OTTHUMP00000062690 |
| <b>Gene ID</b>   | 717                                                                                                                                                                                    |

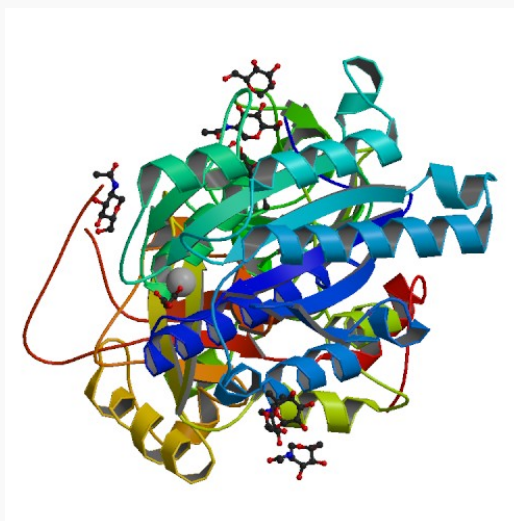
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|----------------------------|-----------------------------------------------------------------------------------------------|
| <b>mRNA Refseq</b>         | <a href="#">NM_000063</a>                                                                     |
| <b>Protein Refseq</b>      | <a href="#">NP_000054</a>                                                                     |
| <b>MIM</b>                 | <a href="#">217000</a>                                                                        |
| <b>UniProt ID</b>          | <a href="#">P06681</a>                                                                        |
| <b>Chromosome Location</b> | 6p21.3                                                                                        |
| <b>Pathway</b>             | Complement and coagulation cascades; Systemic lupus erythematosus; Signaling in Immune system |
| <b>Function</b>            | peptidase activity; serine-type endopeptidase activity                                        |

PDB rendering based on 2i6q.



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