



Recombinant Protein Technical Manual

**Recombinant Human CD16b/FCGR3B Protein
(Active)**
RPES4127

Product Data:

Product SKU: RPES4127

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: O75015

Protein Information:

Molecular Mass: 20 kDa

AP Molecular Mass: 22 kDa

Tag:

Bio-activity: 1. Using the Octet RED System, the affinity constant (Kd) of CD16b bound to Human IgG1 was 80nM.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 20mM Tris, 50mM NaCl, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Low affinity immunoglobulin gamma Fc region receptor III-B; Fc-gamma RIII-beta; FcR0; IgG Fc receptor III; FCG3; FCGR3; CD16b and FCGR4B;FCRIII;FCRIIIb

Immunogen Information:

Sequence: Met 18-Gly 193

Background:

Carbohydrate sulfotransferase 15, also known as N-acetylgalactosamine 4-sulfate 6-O-sulfotransferase, GalNAc4S-6ST, B-cell RAG-associated gene protein, CHST15 and BRAG, is a single-pass type II membrane protein which belongs to the sulfotransferase 1 family. CHST15 / BRAG is expressed in B-cell-enriched tissues but not in fetal or adult thymus. It is expressed in fetal and adult spleen, lymph node, tonsil, bone marrow and peripheral leukocytes. It is not expressed in T-cells. In pro-B, pre-B, and mature B-cell lines, it colocalizes with RAG1. CHST15 / BRAG is a sulfotransferase that transfers sulfate from 3'-phosphoadenosine 5'-phosphosulfate (PAPS) to the C-6 hydroxyl group of the GalNAc 4-sulfate residue of chondroitin sulfate A and forms chondroitin sulfate E containing GlcA-GalNAc(4,6-SO₄) repeating units. It also transfers sulfate to a unique non-reducing terminal sequence, GalNAc(4SO₄)-GlcA(2SO₄)-GalNAc(6SO₄), to yield a highly sulfated structure similar to the structure found in thrombomodulin chondroitin sulfate. CHST15 / BRAG may also act as a B-cell receptor involved in BCR ligation-mediated early activation that mediate regulatory signals key to B-cell development and / or regulation of B-cell-specific RAG expression.