Recombinant Protein Technical Manual

Recombinant Human ACBD6 Protein (His Tag)

RPES3497

Product Data:

Product SKU: RPES3497

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_115736.1

Protein Information:

Molecular Mass: 33.4 kDa

AP Molecular Mass: 36 kDa

Tag: N-His

Bio-activity:

Purity: > 96 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

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

Formulation: Lyophilized from sterile 50mM Tris, 100mM NaCl, pH 8.0

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

Application:

Synonyms: MGC2404;ACBD6

Immunogen Information:

Sequence: Met 1-Ala 282

Background:

Acyl-coenzyme A binding domain-containing member 6 (ACBD6) is a modular protein that carries an acyl-CoA binding domain at its N terminus and two ankyrin motifs at its C terminus. In mammals, there are six members of the acyl-CoA binding domain-containing (ACBD) family, and their annotation is not uniform. All six ACBD proteins contain an ACB domain at the N terminus, but they do not share significant homology at the C-terminal region. ACBD6 is a 32 kDa protein that is predicted by sequence analysis to carry an ACB domain between residues 42 and 125 and two ANK motifs at its C terminus. This protein binds long-chain acyl-CoAs with a strong preference for unsaturated, C18:1-CoA and C20:4-CoA, over saturated, C16:0-CoA, acyl species. ACBD6 is not a ubiquitous protein, but it is expressed in hematopoietic tissues and appears to be restricted to primitive stem cells present in those tissues with functions in blood and vessel development. ACBD6 was detected in bone marrow, spleen, placenta, cord blood, circulating CD34+ progenitors, and embryonic-like stem cells derived from placenta. In placenta, the protein was only detected in CD34+ progenitor cells present in blood and in CD31+ endothelial cells surrounding the blood vessels. These cells were also positive for the marker CD133, and they probably constitute hemangiogenic stem cells, precursors of both blood and vessels. We propose that human ACBD6 represents a cellular marker for primitive progenitor cells with functions in hematopoiesis and vascular endothelium development.