



Recombinant Protein Technical Manual

Recombinant Human CD3d/CD3 delta Protein (His Tag)

RPES4541

Product Data:

Product SKU: RPES4541

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P04234

Protein Information:

Molecular Mass: 10.59 kDa

AP Molecular Mass: 18-23 kDa

Tag: C-His

Bio-activity:

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

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

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 a 0.2 µm filtered solution of PBS, pH 7.4.

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

Application:

Synonyms: T-Cell Surface Glycoprotein CD3 Delta Chain; T-Cell Receptor T3 Delta Chain; CD3d; CD3D; T3D

Immunogen Information:

Sequence: Phe22-Ala105

Background:

CD3D is a single-pass type I membrane protein which contains 1 ITAM domain. T cell receptor-CD3 complex (TCR/CD3 complex) is involved in T-cell development and several intracellular signal-transduction pathways. This complex is critical for T-cell development and function, and represents one of the most complex transmembrane receptors. The T cell receptor-CD3 complex is unique in having ten cytoplasmic immunoreceptor tyrosine-based activation motifs (ITAMs). Defects in CD3D are a cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cell-positive (T-B+^{NK}+ SCID), which is a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels.