



Recombinant Protein Technical Manual

Recombinant Human VSIG4 Protein (His Tag)

RPES2278

Product Data:

Product SKU: RPES2278

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q9Y279

Protein Information:

Molecular Mass: 30.2 kDa

AP Molecular Mass: 50 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % 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°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 20mM PB, 150mM NaCl, pH 7.2.

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

Application:

Synonyms: V-Set and Immunoglobulin Domain-Containing Protein 4; Protein Z39Ig; VSIG4; CRlg; Z39IG

Immunogen Information:

Sequence: Arg20-Pro283

Background:

V-Set and Immunoglobulin Domain-Containing Protein 4 (VSIG4) is a 45-50 kDa macrophage-specific transmembrane glycoprotein that belongs to the B7 family-related protein and an Ig superfamily member. In contrast to the B7 family members which contain two IgG domains, VSIG4 contains one complete V-type Ig domain and a truncated C-type Ig domain. VSIG4 is abundantly expressed in several fetal tissues. In adult tissues, the highest expression of VSIG4 is in lung and placenta. It is also expressed in resting macrophages. No VSIG4 expression appears to be present in T and B cells. The specific expression of VSIG4 on resting macrophages in tissue suggests that this inhibitory ligand may be important for the maintenance of T cell unresponsiveness in healthy tissues. VSIG4 functions as a negative regulator of T cell activation, and may be involved in the maintenance of peripheral T cell tolerance, and is also identified as a potent suppressor of established inflammation. VSIG4 is a phagocytic receptor, strong negative regulator of T-cell proliferation and IL2 production. It is a potent inhibitor of the alternative complement pathway convertases. Human VSIG4 is 399 amino acids (aa) in length. It is a type I transmembrane (TM) glycoprotein that contains a 264 aa extracellular domain (ECD) (aa 20 - 283) and a 95 aa cytoplasmic region.