



Recombinant Protein Technical Manual

Recombinant Mouse VSIG4 Protein (His Tag)

RPES3742

Product Data:

Product SKU: RPES3742

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: F6TUL9

Protein Information:

Molecular Mass: 19.7 kDa

AP Molecular Mass: 28-35 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by 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 PBS, pH7.4.

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

Application:

Synonyms: Vsig4;V-set and immunoglobulin domain containing 4;

Immunogen Information:

Sequence: His20-Pro187

Background:

V-set and immunoglobulin domain containing 4 (VSIG4) is a type I transmembrane glycoprotein that is a B7 family-related protein and an Ig superfamily member. Mouse VSIG4 is synthesized as a 280 amino acid (aa) precursor that contains a signal sequence, an IgV-type immunological domain (aa 3615), one potential N-linked glycosylation site, and a single transmembrane domain. The IgV domain of mouse VSIG4 shares 86% and 80% aa sequence identity with the IgV domains of rat and human VSIG4, respectively. VSIG4 functions as a negative regulator of mouse as well as human T cell activation, and may be involved in the maintenance of peripheral T cell tolerance and/or unresponsiveness. VSIG4 acts as a macrophage complement receptor by binding complement fragments C3b and iC3b. VSIG4 binding to C3b inhibits complement activation through the alternative pathway, making it a potent suppressor of established inflammation.