

Recombinant Protein Technical Manual Recombinant Mouse VSIG4 Protein (His & Fc Tag)

RPES4131

Product Data:

Product SKU: RPES4131 **Size:** 50μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: NP 808457.1

Protein Information:

Molecular Mass: 47 kDa

AP Molecular Mass: 60 kDa

Tag: C-His-Fc

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g}$ of the protein 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 sterile PBS, pH 7.4

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

Application:

Synonyms: A530061A11;BC025105;CRIg;Z39IG

Immunogen Information:

Sequence: Met 1-Pro 187

Background:

VSIG4 (V-set and immunoglobulin domain containing 4), also known as complement receptor of the immunoglobulin superfamily (CRIg) and Z39Ig, is a type I transmembrane glycoprotein. It is a 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 I g domain and a truncated C-type I g domain. VSIG4 is exclusively expressed on tissue resident macrophages and binds to multimers of C3b and iC3b that are covalently attached to particle surfaces. No VSIG4 expression appears to be present in T and B cells. 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. Mouse VSIG4 is synthesized as a 280 amino acid precursor that contains a signal sequence, an V-type I g domain (aa 3615), one potential N-linked glycosylation site, and a single transmembrane domain. The V-type I g domain of mouse VSIG4 shares 86% and 80% aa sequence identity with the V-type I g domains of rat and human VSIG4, respectively.