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Recombinant Human VSIG3 Fc Chimera

Catalog Number: 9229-VS

RDSYSTEMS

DESCRIPTION				
Source	Mouse myeloma cell line, NS0-derived human VSIG3 protein			
	Human VSIG3 (Leu23-Gly245) Accession # BAC07546	IEGRMD	Human IgG ₁ (Pro100-Lys330)	
	N-terminus	C-terminus		
N-terminal Sequence Analysis	Leu23			
Structure / Form	Disulfide-linked homodimer			
Predicted Molecular Mass	50 kDa			

SPECIFICATIONS		
SDS-PAGE	56-69 kDa, reducing conditions	
Activity	Measured by its binding ability in a functional ELISA. Recombinant Human VSIG3 Fc Chimera (Catalog # 9229-VS) binds to Recombinant Human VISTA/B7-H5/PD-1H Fc Chimera (Catalog # 7126-B7) with an ED ₅₀ of 0.0750 - 0.750 μg/mL.	
Endotoxin Level	<0.10 EU per 1 μ g of the protein by the LAL method.	
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with trehalose. See Certificate of Analysis for details.	

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 200 μg/mL in PBS.		
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.		
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.		
	 12 months from date of receipt, -20 to -70 °C as supplied. 		
	 1 month, 2 to 8 °C under sterile conditions after reconstitution. 		
	 3 months, -20 to -70 °C under sterile conditions after reconstitution. 		



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bio-techne® RDSYSTEMS

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BACKGROUND

VSIG3, also known as IGSF11, BT-IgSF, and CLMP, is an approximately 50 kDa transmembrane adhesion protein (1). Mature human VSIG3 consists of a 219 amino acid (aa) extracellular domain (ECD) that contains two tandem Ig-like domains, a 21 aa transmembrane segment, and a 169 aa cytoplasmic domain (2). Within the ECD, human VSIG3 shares 95% aa sequence identity with mouse and rat VSIG3. Alternative splicing generates additional isoforms with a substituted signal peptide that may also have a deletion in the second Ig-like domain (3). VSIG3 is expressed on epithelial and endothelial cells, neurons and glial cells, and platelets (2-4). It localizes to epithelial tight junctions and mediates homophilic in trans cell adhesion (3-5). VSIG3 also localizes to neuronal postsynaptic densisties where it recruits the GluA1 and GluA2 subunits of AMPA receptors and supports excitatory synaptic transmission (6). The short isoform can be up-regulated in gastric cancer (7). In zebrafish, VSIG3 is expressed in melanophores and their precursors and plays a role in the development and patterning of pigment cells (8).

References:

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