



Recombinant Protein Technical Manual

Recombinant Human IZUMO1 Protein (His Tag)

RPES3886

Product Data:

Product SKU: RPES3886

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: AAH34769.1

Protein Information:

Molecular Mass: 32.1 kDa

AP Molecular Mass: 43 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 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: IZUMO

Immunogen Information:

Sequence: Met 1-Arg292

Background:

Izumo is a sperm membrane protein which plays a key role in the fusion in the mouse. It has an Immunoglobulin (Ig) domain and an N-terminal domain for which neither the functions nor homologous sequences are known. Up to now, there four members has an N-terminal domain with significant homology to the N-terminal domain of Izumo. We call this domain Izumo domain. The four proteins are Izumo 1, 2, 3, and 4. Izumo domain possesses the ability to form dimers, whereas the transmembrane domain or the cytoplasmic domain or both of Izumo 1 are required for the formation of multimers of higher order. Izumo 1-3 are transmembrane proteins expressed specifically in the testis, and Izumo 4 is a soluble protein expressed in the testis and in other tissues. Izumo 1, 3, and 4 formed protein complexes on sperm, Izumo 1 forming several larger complexes and Izumo 3 and 4 forming a single larger complex. Izumo1 is essential for sperm-egg plasma membrane binding and fusion.