Recombinant Human IZUMO1 Protein (His Tag)

Catalog No. PKSH030610

Note: Centrifuge before opening to ensure complete recovery of vial contents.

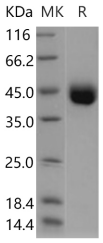
Description

Synonyms	IZUMO
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Arg292
Accession	AAH34769.1
Calculated Molecular Weight	32.1 kDa
Observed molecular weight	43 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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.