## Recombinant Human SPEG/APEG-1 Protein (His Tag)

## Catalog Number: PKSH030334

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

| Description   |   |
|---------------|---|
| Species       | Human   |
| Source        | E.coli-derived Human SPEG/APEG-1 protein Met 1-Glu 113, with an C-terminal His            |
| Calculated MW | 14 kDa  |
| Observed MW   | 19 kDa  |
| Accession     | Q15772-4  |
| Bio-activity  | Not validated for activity  |
| Properties    |   |
| Purity        | > 85 % as determined by reducing SDS-PAGE.  |
| Concentration | Subject to label value.   |
| Endotoxin     | Please contact us for more information.   |
| Storage       | Store at $<$ -20°C, stable for 6 months. Please minimize freeze-thaw cycles.              |
| Shipping      | This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel |
|               | packs. Upon receipt, store it immediately at $< -20^{\circ}$ C.                           |
| Formulation   | Supplied as sterile solution of PBS, pH 7.4   |
| Data          |   |
| KDa MK        | R   |
| 116           |   |
| 66.2          |   |
| 45.0          |   |
| 35.0          |   |

> 85 % as determined by reducing SDS-PAGE.

25.0

18.4 14.4

## Background

Striated muscle preferentially expressed protein kinase, also known as aortic preferentially expressed protein 1, APEG-1, SPEG and KIAA1297, is a protein which belongs to the protein kinase superfamily and CAMK Ser/Thr protein kinase family. SPEG/APEG-1 contains twofibronectin type-III domains, nine Ig-like (immunoglobulin-like) domains, two protein kinase domains. Isoformlof SPEG is preferentially expressed in striated muscle. Non-kinase form such as isoform3of SPEG is predominantly expressed in the aorta. Isoform3of SPEG appears to be expressed only in highly differentiated ASMC in normal vessel walls and down-regulated in dedifferentiated ASMC. Isoform3of SPEG may have a role in regulating the growth and differentiation of arterial smooth muscle cells. Isoform3of SPEG is quickly down-regulated in response to vascular injury, when ASMC cells change from a quiescent to a proliferative phenotype.