

DESCRIPTION

Source	Human embryonic kidney cell, HEK293-derived human Vasorin/SLIT-like 2 protein Cys24-Asn573, with a C-terminal 6-His tag Accession # Q6EMK4
N-terminal Sequence Analysis	Cys24
Predicted Molecular Mass	60 kDa

SPECIFICATIONS

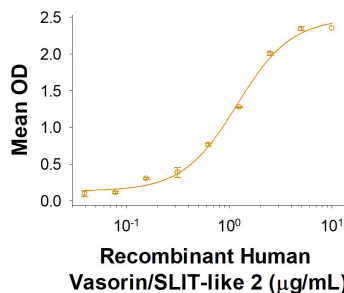
SDS-PAGE	83-95 kDa, under reducing conditions
Activity	Measured by its binding ability in a functional ELISA. When Recombinant Human TGF- β 1 (Catalog # 240-B) is used at 2 μ g/mL (100 μ L/well), Recombinant Human Vasorin/SLIT-like 2 (Catalog # 10156-VN) binds with an ED ₅₀ of 0.6-3.6 μ g/mL.
Endotoxin 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 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 μ g/mL in PBS.
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 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.

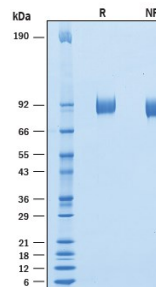
DATA

Binding Activity



When Recombinant Human TGF- β 1 (Catalog # 240-B) is used at 2 μ g/mL (100 μ L/well), Recombinant Human Vasorin/SLIT-like 2 (Catalog # 10156-VN) binds with an ED₅₀ of 0.6-3.6 μ g/mL.

SDS-PAGE



2 μ g/lane of Recombinant Human Vasorin/SLIT-like 2 His-tag (Catalog # 10156-VN) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 83-95 kDa.

BACKGROUND

Vasorin, also known as SLIT-like 2, is an approximately 110-kDa transmembrane protein that is expressed on vascular smooth muscle cells and in the developing skeletal system (1, 2). It is down-regulated following vascular injury (1). A 95-kDa soluble form of Vasorin can be shed from the cell surface by ADAM17-mediated cleavage (3). The shed soluble form of Vasorin binds to TGF-beta 1, 2, and 3 and prevents TGF-beta-induced effects including intimal formation and epithelial mesenchymal transition (1, 3). Soluble Vasorin is elevated in the serum of hepatic carcinoma patients relative to normal or non-cancerous hepatic disease (4). It promotes tumor cell proliferation, migration, and survival (4). Mature human Vasorin consists of a 552 amino acid (aa) extracellular domain (ECD) with 10 leucine rich repeats (LRR) flanked by one LRRNT and one LRRCT domain, one EGF-like domain, and one Fibronectin type III domain, a 21 aa transmembrane segment, and a 77 aa cytoplasmic domain (1). Within the ECD, human Vasorin shares 85% and 86% aa sequence identity with mouse and rat Vasorin, respectively.

References:

1. Ikeda, Y. *et al.* (2004) *Proc. Natl. Acad. Sci. USA* **101**:10732.
2. Krautzbeger, A.M. *et al.* (2012) *Gene Expr. Patterns* **12**:167.
3. Malapeira, J. *et al.* (2011) *Oncogene* **30**:1912.
4. Li, S. *et al.* (2015) *Oncotarget* **6**:10045.