Bioactive

Vegfa (Rat) Recombinant Protein

Catalog # P4853 Size 10 ug

Applications

Result of activity analysis

Result of activity analysis

Serial dilutions of rat Vegfa, starting at 250 ng/mL, were added to HUVECs. After 87 hours, cell proliferation was measured and the linear portion of the curve was us used to calculate the ED50.

Specification

Product Description	Rat Vegfa recombinant protein expressed in *Escherichia coli*.
Sequence	MAPTTEGEQKAHEVVKFMDVYQRSYCRPIETLVDIFQEYPDEIEYIFKPSCVPLMRCAGCCNDEAL ECVPTSESNVTMQIMRIKPHQSQHIGEMSFLQHSRCECRPKKDRTKPEKHCEPCSERRKHLFVQ DPQTCKCSCKNTDSRCKARQLELNERTCRCDKPRR
Host	Escherichia coli
Theoretical MW (kDa)	38.8
Form	Lyophilized
Preparation Method	*Escherichia coli* expression system
Endotoxin Level	< 0.1 EU/ug
Activity	The activity is determined by the dose-dependent induced proliferation of HUVECs. The expected E D_{50} for this effect is 5.9-8.9 ng/mL.
Storage Buffer	Lyophilized from 10 mM NaP, pH 7.5
Storage Instruction	Store at -20°C on dry atmosphere. After reconstitution with sterilized water, store at -20°C. Aliquot to avoid repeated freezing and thawing.

Copyright © 2023 Abnova Corporation. All Rights Reserved.

Note	Result of activity analysis Result of activity analysis Serial dilutions of rat Vegfa, starting at 250 ng/mL, were added to HUVECs. After 87 hours, cell prolif eration was measured and the linear portion of the curve was us used to calculate the ED50.

Applications

- Functional Study
- SDS-PAGE

Gene Info — Vegfa

Entrez GeneID	83785
Protein Accession#	AAL07526.1
Gene Name	Vegfa
Gene Alias	VEGF164, Vegf
Gene Description	vascular endothelial growth factor A
Gene Ontology	Hyperlink
Other Designations	-

Publication Reference

- Quinoline-Based Neuropilin-1 Antagonists Exhibit a Pure Antagonist Profile and Block Vascular Endothelial Growth Factor-Induced Pain.

  Sara Hestehave, Silvia Dragoni, Philip Fallon, Filipa Mota, Aida Calderon-Rivera, Kimberly Gomez, Jonathan Powell, Anastasia Patsiarika, Tifelle Reisinger, Stuart Crosby, A W Edith Chan, David Steadman, Natalie Winfield, Ashley Jarvis, John Martin, Ian C Zachary, Paul Frankel, Snezana Djordjevic, Christiana Ruhrberg, Rajesh Khanna, David L Selwood.

  ACS Pharmacology & Translational Science 2025 Oct; 8(11):3844.

  Application: Qual, Rat, DRG Neurons

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- SARS-CoV-2 spike protein co-opts VEGF-A/neuropilin-1 receptor signaling to induce analgesia.

  Aubin Moutal, Laurent F Martin, Lisa Boinon, Kimberly Gomez, Dongzhi Ran, Yuan Zhou, Harrison J Stratton, Song Cai, Shizhen Luo, Kerry Beth Gonzalez, Samantha Perez-Miller, Amol Patwardhan, Mohab M Ibrahim, Rajesh Khanna

  Pain 2021 Nov; 162(1):243-252.

Copyright © 2023 Abnova Corporation. All Rights Reserved.