

HumanKine[®] VEGF-C (Recombinant Human)



Animal Component-Free

Human cell expressed

Tag-Free

Endotoxin Free

Product Description

Vascular endothelial growth factor C (VEGFC) is a member of the platelet-derived growth factor/vascular endothelial growth factor (PDGF/VEGF) family. VEGFC protein plays an essential role in angiogenesis (PMID: 9826710) and endothelial cell growth and migration (PMID: 18509061) and has a profound effect on the blood vasculature (PMID: 29484295). VEGFC can bind and activate signal transduction through both VEGFR-2 (flk1) and VEGFR-3 (flt4) receptors. The biosynthesis and maturation of VEGFC is a complex stepwise proteolytic process (PMID: 9233800), during which its properties and affinities for its interaction partners change. Only the fully processed form can bind and activate VEGFR-2 receptors (PMID: 21148085). Diseases associated with VEGFC include lymphatic malformations (PMID: 32513927) and Milroy-like primary lymphedema (PMID: 23410910).

Alternative Names

FLT4 ligand, FLT4-L, Vascular endothelial growth factor related protein (VRP), VRP, VEGFC, VRPFLT4 ligand DHM

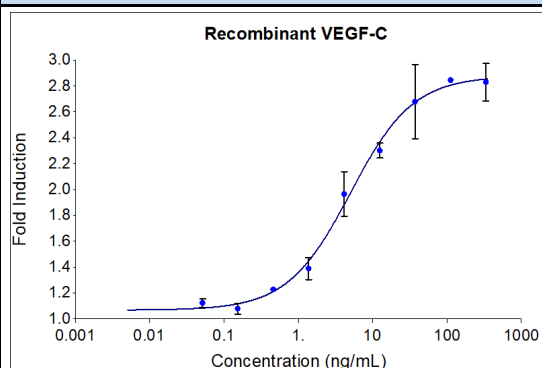
Source

Human Embryonic Kidney cells (HEK293). HEK293-derived VEGF-C protein

Specifications

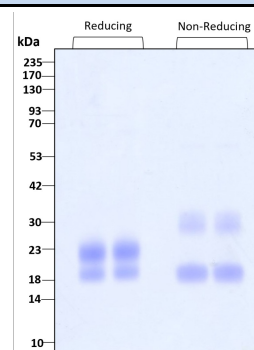
Test	Method	Specification
Activity	Dose-dependent production of luciferase in a HEK293T reporter cell line	2-16 ng/mL
Molecular Mass	SDS-PAGE	18 and 28 kDa, homodimer, glycosylated
Purity	SDS-PAGE	>95%
Endotoxin	LAL	<1 EU/μg

Activity Data



Recombinant human VEGF-C (HZ-1336) induces dose-dependent luciferase production in a HEK293T reporter cell line. Luciferase assay production was assessed by One-Step[™] luciferase assay Kit. HEK293T reporter cells were treated with increasing concentrations of recombinant VEGF-C for 18 hours. The EC₅₀ was determined using a 4-parameter non-linear

SDS-PAGE



Preparation	
Shipping Temperature	ambient temperature
Formulation	50 mM Acetate pH 4.5 + 250 mM NaCl
Reconstitution	Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein at 0.2 mg/mL in sterile 1x PBS pH 7.4 containing 0.1% endotoxin-free recombinant serum albumin (HSA). Gently swirl or tap vial to mix.

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
Avoid repeated freeze-thaw cycles.			

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