

Recombinant Human Vascular Endothelial Cell Growth Factor (VEGF)

Catalog Number PHC9394 (10 µg), PHC9391 (100 µg), PHC9393 (1 mg)

Pub. No. MAN0003577 Rev. A.0

Product specifications

Lot number	See product label.
Molecular weight	~40 kDa (homodimer), 165 amino acid residues/subunit. Migrates as a diffuse band on SDS-PAGE due to heterogeneous glycosylation.
Purity	≥95% as determined by SDS PAGE analysis.
Amino acid sequence	APMAEGGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCGGC CNDEGLECVP TEESNITMQI MRIKPHQGGH IGEMSFQHN KCECRPKKDR ARQENPCGCGP SERRKHLFVQ DPQTCKCCK NTDSRCKARQ LELNERTCRC DKPRR
Biological activity	ED ₅₀ <6.00 ng/mL, determined by the dose dependent proliferation of human umbilical vein cells (HUVEC). Determine the optimal concentration for each specific application using an initial dose response assay.
Formulation	Lyophilized, carrier free.
Sterility	Filtered before lyophilization through a 0.22 micron sterile filter.
Endotoxin	<0.1 ng/µg
Production	Produced in Human Embryonic Kidney 293 cells and purified via sequential chromatography.
Reconstitution recommendation	Centrifuge the vial briefly, before opening to bring the contents to the bottom. Reconstitute the lyophilized protein in sterile, distilled water or appropriate buffered solution containing 0.1% BSA to regain full activity. Apportion the reconstituted protein into working aliquots and store at ≤ -20°C. Make any further dilutions of the reconstituted protein in buffered solution containing a carrier protein such as PBS with 0.1% BSA.
Suggested working dilutions	The optimal concentration should be determined for each specific application.
Storage	Store the lyophilized protein at 2–8°C or –20°C for long term storage, preferably desiccated. Upon reconstitution, apportion into working aliquots and store at ≤ -20°C. Avoid repeated freeze-thaw cycles.
Expiration date	Expires one year from date of receipt when stored as instructed.
References	Abraham, JA, Whang, J, Tumolo, A, Mergia, A, Friedman, J, Gospodarowicz, D, and Fiddes, JC. (1986) Human basic fibroblast growth factor: nucleotide sequence and genomic organization. <i>EMBO J.</i> 5:2523-2528. Seddon, A, Decker, M, Muller, T, Armellino, D, Kovessi, I, Gluzman, Y, and Bohlen, P. (1991) Structure/activity relationships in basic FGF. <i>Ann. N.Y. Acad. Sci.</i> 638:98-105. Bruno, E, Cooper, RJ, Wilson, EL, Gabrilove, JL, and Hoffman, R. (1993) Basic fibroblast growth factor promotes the proliferation of human megakaryocyte progenitor cells. <i>Blood</i> 82:430-435. Kitchens, DL, Snyder, E, and Gottlieb, D. (1994) FGF and EGF are mitogens for immortalized neural progenitors. <i>J. Neurobiol.</i> 25:797-807. Izevbogie, EB, Gutkind, JS, and Ray, PE. (2000) Angiotensin II and basic fibroblast growth factor mitogenic pathways in human fetal mesangial cells. <i>Pediatr. Res.</i> 47:614-621. Izevbogie, EB, Gutkind, JS, and Ray, PE. (2000) Isoproterenol inhibits fibroblast growth factor-2-induced growth of renal epithelial cells. <i>Pediatr. Nephrol.</i> 14:726-734.

Limited product warranty

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Explanation of Symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		



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For descriptions of symbols on product labels or product documents, go to thermofisher.com/symbols-definition.

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