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Product Data Sheet

Recombinant Mouse VEGF-120 (carrier-free)

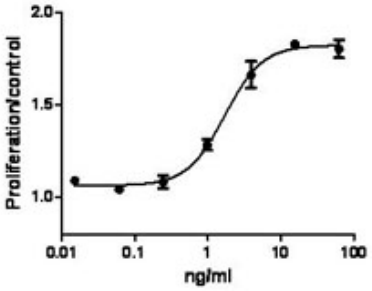
Catalog # / Size: 580902 / 10 µg
580904 / 25 µg
580906 / 100 µg
580908 / 500 µg

Source: Mouse $VEGF_{120}$, amino acids Ala27-Arg146 (Accession # S38100) was expressed in *E. coli.*

Molecular Mass: The 120 amino acid recombinant protein has a predicted molecular mass of approximately 14,071 Da. This protein exists as a disulfide-linked homodimer. The DTT-reduced protein migrates at approximately 15kDa and the non-reduced protein migrates as a homodimer, at approximately 30kDa by SDS-PAGE. The N-terminal amino acid is Alanine.

Purity: Purity is >98%, as determined by Coomassie stained SDS-PAGE.

Endotoxin Level: Endotoxin level is <0.1 EU/µg (<0.01 ng/µg) protein as determined by the LAL method.



VegfA induces the proliferation of HUVEC cells

Activity: ED50 = 1-4 ng/ml, corresponding to a specific activity of 1-0.25 x 10^6 units/mg, as determined by the dose dependent stimulation of HUVEC cells proliferation.

Preparation: 10-100µg sizes are bottled at 200µg/mL. 500µg sizes and larger are bottled at the concentration indicated on the vial.

Formulation: 0.22µm filtered protein solution is in 5mM Citric Acid, 5mM NaH_2PO_4, 150mM NaCl, pH 4.0.

Storage: Unopened vial can be stored at -20°C for six months or at -70°C for one year. For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10µg/mL in buffer containing carrier protein such as 1% BSA or HSA or 10% FBS. For long term storage, aliquot into polypropylene vials and store in a manual defrost freezer. **Avoid repeated freeze/thaw cycles.**

Applications:

Applications: Bioassay

Description: VegfA belong to the VEGF family which has at least 7 members, VEGF-A, VEGF-B, VEGF-C, VEGF-D, VEGF-E, PlGF and snake venom-derived VEGFs such as T.f. (*Trimeresurus flavoviridis*) svVEGF. In humans, VEGF-A is highly expressed in most of the solid tumors generated in breast, lung, renal, colorectal and liver tissues. VEGF-A has strong vascular permeability activity, and significantly contributes to the formation of ascites tumors. VEGF can act as a direct proinflammatory mediator during the pathogenesis of RA, and protect rheumatoid synoviocytes from apoptosis, which contributes to synovial hyperplasia. VEGF is expressed in synovial macrophages and synovial fibroblasts in the synovial tissues of RA patients.

Antigen References:
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2. Shibuya M, *et al. BMB Rep.* 2008 41(4):278-86 2008.
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4. Conn G, *et al. Proc. Nati. Acad. Sci.* 87:1323-1327 1990.
5. Gerber H, *et al. Nature* 417:954-958 2002.

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