Human Vascular Endothelial Growth Factor-165 (hVEGF<sub>165</sub>)

Source: Recombinant human VEGF<sub>165</sub> (hVEGF<sub>165</sub>) Ala207-Arg371 (Accession #NP_001020539) was expressed in human 293 cells at Cell Signaling Technology.

Molecular Characterization: Recombinant hVEGF<sub>165</sub> contains no “tags” and has a calculated MW of 19,165. DTT-reduced protein migrates as a 24 kDa polypeptide and the non-reduced cystine-linked homodimer migrates as a 40 kDa protein. The expected amino-terminal APMAE of recombinant non-reduced cystine-linked homodimer migrates as a 40 kDa reduced protein. All lots are greater than 98% pure.

Endotoxin: Less than 0.01 ng endotoxin/1 μg hVEGF<sub>165</sub>

Purity: >98% as determined by SDS-PAGE of 6 μg reduced (+) and non-reduced (-) recombinant hVEGF<sub>165</sub>. All lots are greater than 98% pure.

Bioactivity: The bioactivity of recombinant hVEGF<sub>165</sub> was determined in a cell proliferation assay using HUVEC. The bioactivity of recombinant hVEGF<sub>165</sub> was determined by SDS-PAGE of 6 μg reduced (+) and non-reduced (-) recombinant hVEGF<sub>165</sub>. All lots are greater than 98% pure.

Formulation: With carrier: Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.2 containing 20 μg BSA per 1 μg hVEGF<sub>165</sub>

Carrier free: Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.2

Reconstitution: With carrier: Add sterile PBS or PBS containing 1% bovine or human serum albumin or 5-10% FBS to a final hVEGF<sub>165</sub> concentration of greater than 50 μg/ml. Solubilize for 30 minutes at room temperature with occasional gentle vortexing.

Carrier free: Add sterile PBS or PBS containing protein to minimize absorption of hVEGF<sub>165</sub> to surfaces. Solubilize for 30 minutes at room temperature with occasional gentle vortexing. Stock hVEGF<sub>165</sub> should be greater than 50 μg/ml.

Storage: Stable in lyophilized state at -20°C for 1 year after receipt. Sterile stock solutions reconstituted with carrier protein are stable at 4°C for 2 months and at -20°C for 6 months. Avoid repeated freeze-thaw cycles.

Maintain sterility: Storage at -20°C should be in a manual defrost freezer.

Applications: Optimal concentration for the desired application should be determined by the user.

Background References: