

## Product datasheet

# Recombinant human VEGF189 protein ab106307

### 製品の概要

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製品名	Recombinant human VEGF189 protein
タンパク質長	Full length protein

### 製品の詳細

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由来	Recombinant
由来	Escherichia coli

### アミノ酸配列

アクセッション番号 [P15692](#)

生物種	Human
分子量	42 kDa
領域	27 to 215

### 特性

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Our [Abpromise guarantee](#) covers the use of **ab106307** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

生理活性	The ED50 for stimulation of 3H-thymidine incorporation and cell proliferation by human umbilical vein endothelial cells for VEGF189 has been determined to be in the range of 1-4 ng/ml.
アプリケーション	Functional Studies SDS-PAGE
エンドトキシン・レベル	< 0.100 Eu/μg
精製度	> 98 % SDS-PAGE. > 98% by SDS-PAGE and visualised by silver stain.
製品の状態	Lyophilised

### 前処理および保存

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保存方法および安定性	Shipped at 4°C. The lyophilized protein is stable for a few weeks at room temperature. Store at -20°C long term. Preservative: None
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Constituents: 50mM Acetic acid

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### 再構成

Should be reconstituted in PBS or medium containing at least 0.1% human or bovine serum albumin to a concentration not lower than 50 µg/ml.

#### 関連情報

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##### 機能

Growth factor active in angiogenesis, vasculogenesis and endothelial cell growth. Induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis and induces permeabilization of blood vessels. Binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. NRP1/Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to KDR but does not activate downstream signaling pathways, does not activate angiogenesis and inhibits tumor growth.

##### 組織特異性

Isoform VEGF189, isoform VEGF165 and isoform VEGF121 are widely expressed. Isoform VEGF206 and isoform VEGF145 are not widely expressed.

##### 関連疾患

Defects in VEGFA are a cause of susceptibility to microvascular complications of diabetes type 1 (MVCD1) [MIM:603933]. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis.

##### 配列類似性

Belongs to the PDGF/VEGF growth factor family.

##### 細胞内局在

Secreted. VEGF121 is acidic and freely secreted. VEGF165 is more basic, has heparin-binding properties and, although a significant proportion remains cell-associated, most is freely secreted. VEGF189 is very basic, it is cell-associated after secretion and is bound avidly by heparin and the extracellular matrix, although it may be released as a soluble form by heparin, heparinase or plasmin.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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