

# Recombinant human VEGF189 protein ab106307

**2 References** [画像数 3](#)

### 製品の詳細

<b>製品名</b>	Recombinant human VEGF189 protein
<b>生理活性</b>	Measured by the stimulation of cell proliferation in human umbilical vein endothelial cells in the range of 2-20 ng/ml.
<b>精製度</b>	> 98 % SDS-PAGE. Gel filtration, purification via Uno S6
<b>エンドキシン・レベル</b>	< 0.100 Eu/μg
<b>発現系</b>	Escherichia coli
<b>アクセッション番号</b>	<b><u>P15692</u></b>
<b>タンパク質長</b>	Full length protein
<b>Animal free</b>	No
<b>由来</b>	Recombinant
<b>生物種</b>	Human
<b>配列</b>	APMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYPDE IEYIFKPS CVPLMRCGGCCNDEGLECVPTTEESNITMQIMRIKPHQGQHIG EMSFLQHN KCECRPKKDRARQEKKSVRGKGGQKRKRKKSRYKSWSVPCG PCSEERRKH LFVQDPQTCKCSCKNTDSRCKARQLELNERTCRCDKPRR
<b>予測される分子量</b>	42 kDa
<b>領域</b>	27 to 232
<b>配列の追加情報</b>	Mature protein without signal peptide.

### 特性

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.

<b>アプリケーション</b>	Functional Studies SDS-PAGE
<b>製品の状態</b>	Lyophilized

**備考****Molecular weight:** ~42 kDa (Dimer)**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.

Constituent: 0.3% 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**

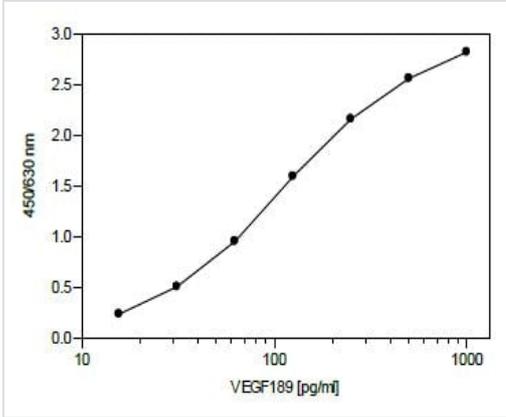
Belongs to the PDGF/VEGF growth factor family.

**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.

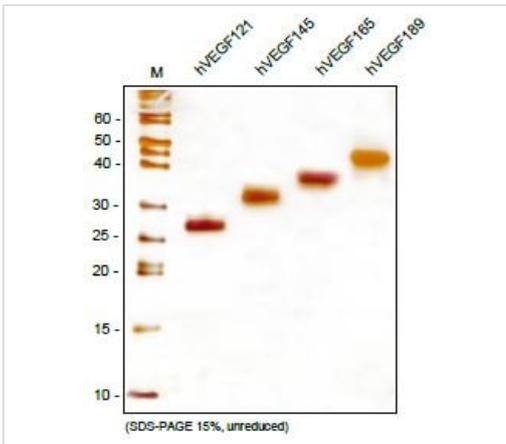
**画像**

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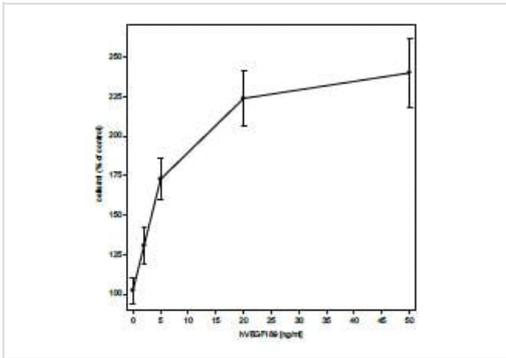
Functional Studies - Recombinant human VEGF189 protein (ab106307)

VEGF-A Sandwich-ELISA using VEGF189 as standard. Mouse anti-human VEGF-A was used as capture antibody, Biotinylated mouse anti-human VEGF-A was used for detection.



SDS-PAGE - Recombinant human VEGF189 protein (ab106307)

SDS-PAGE analysis of recombinant human VEGF-A isoforms produced in E. coli. Samples were loaded under non-reducing conditions in 15% SDS-polyacrylamide gel and stained with Silver stain.



VEGF189-induced proliferation of primary human dermal lymphatic endothelial cells (HDLEC). HDLECs were stimulated with increasing amounts of recombinant human VEGF189.

Functional Studies - Recombinant human VEGF189 protein (ab106307)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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