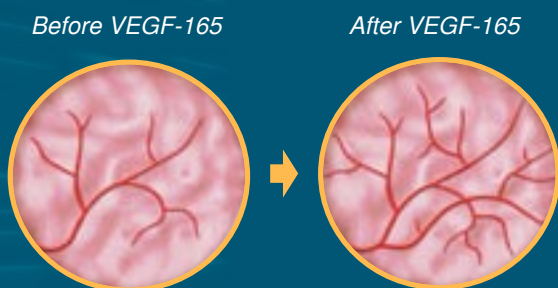


## VEGF-165

Vascular Endothelial Growth Factor-165

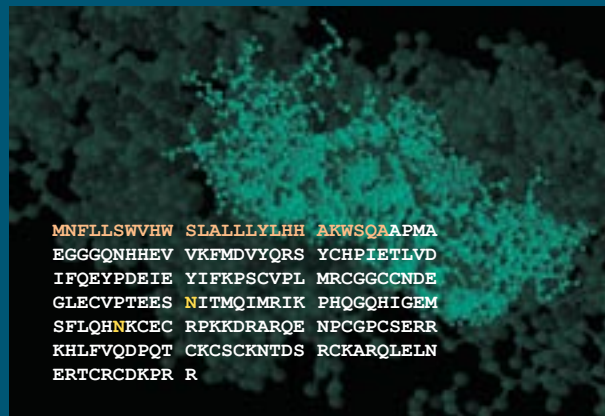
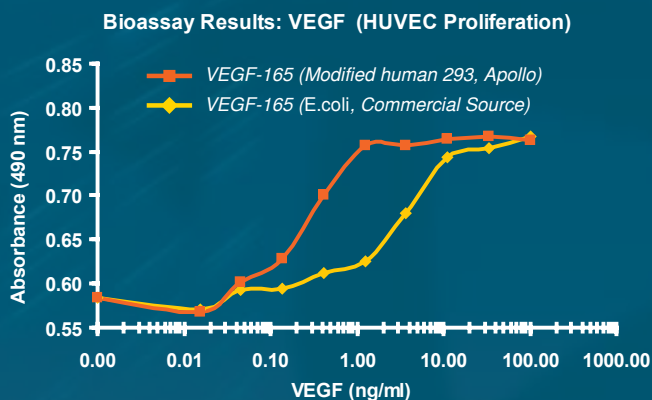
Vascular Endothelial Growth Factor (VEGF-165) is a naturally occurring angiogenic protein used in researching treatments for coronary heart disease.

Preliminary data indicate that human cell expressed VEGF-165 from Apollo Cytokine Research demonstrates up to ten-fold better activity in its ability to stimulate growth of human umbilical vein endothelial cells (HUVEC) than VEGF-165 produced from *E.coli* cells.<sup>1</sup>



Schematic effect of VEGF-165 protein

The improved efficacy and biological activity of VEGF-165 from Apollo Cytokine Research may be due to the presence of post-translational glycan structures, some of which are terminally sialylated. These structures are absent from VEGF-165 expressed from *E. coli* cells.



Protein sequence of VEGF-165, showing signal peptide in orange and potential N-glycosylation attachment sites in gold

Apollo Cytokine Research specialises in the production of recombinant human cytokines and growth factors from human cells. The resulting proteins more closely mimic naturally occurring cytokines because they exhibit human post-translational modifications.

For further information, or to view our full product list, please visit our website ([www.apollocytokineresearch.com](http://www.apollocytokineresearch.com)).

### Ordering Information

Product	Product Code
VEGF – 165 (5µg)	3075C
VEGF – 165 (10µg)	3075D

*These products are for Research Use Only*

[1] These data were independently validated.

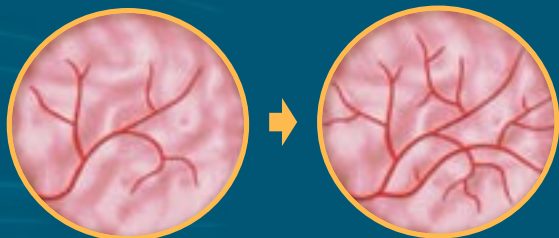
## 血管内皮生长因子 (VEGF-165)

血管内皮生长因子-165 (VEGF-165) 是一种天然产生及促进血管新生的蛋白，用于冠心病治疗研究。

根据初步数据显示，Apollo Cytokine Research 以人类细胞表达的 VEGF-165 在刺激人类脐静脉内皮细胞 (HUVEC) 的功用上，与一般 E. coli 所表达的 VEGF-165 相比，有十倍以上的功效。

使用 VEGF-165 前

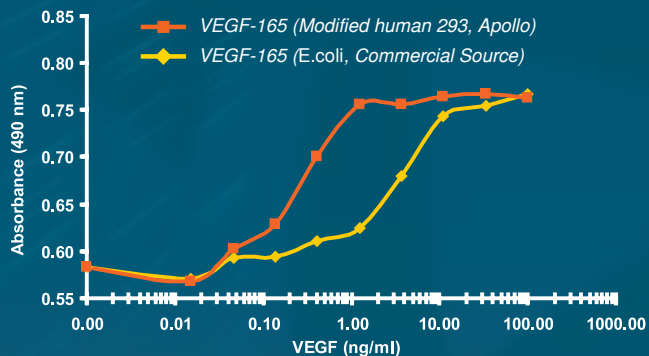
使用 VEGF-165 後



VEGF-165 在皮内细胞生长的效果

Apollo Cytokine Research 研究出在人类细胞所表达的 VEGF-165 之所以比一般在 E. coli 表达的 VEGF-165 有更佳的功效及生理作用，是可能由於人类细胞可表达接近天然的后转译多糖结构。这些接近人类天然的后转译多糖结构不存在於一般 E. coli 表达的 VEGF-165 内。

Bioassay Results: VEGF (HUVEC 细胞分裂繁殖)



Protein sequence of VEGF-165, showing signal peptide in orange and potential N-glycosylation attachment sites in gold

Apollo Cytokine Research 专门研究生产用人类细胞所表达之细胞激素 (cytokines)。由於 Apollo Cytokine Research 所生产的细胞激素拥有人类的后转译多糖结构，Apollo Cytokine Research 生产的细胞激素更为接近人类天然生产的细胞激素。

如需要更多关于我们的资料及产品介绍，请观览我们的网页。

### 订购资料

产品	产品编号
VEGF - 165 (5µg)	3075C
VEGF - 165 (10µg)	3075D

这些产品只供研究使用。

[1] 这实验结果经外部鉴定确认。