

Rat VEGFA protein, His tag (active)

Cat. No. GTX00343-pro

Applications	Functional Assay	References (1) Package 10 μg
Species	Rat	

Applications

Application Note

Vascular endothelial growth factor A (VEGF-A), a glycosylated mitogen, is known to be a vascular permeability factor and an endothelial cell growth factor secreted by the smooth muscle and endothelial cells. It has been reported that VEGF-A induces vascular permeability and growth, promotes monocyte/macrophage migration, and inhibits cell apoptosis and so on. To test the effect of VEGF-A on cell proliferation of ECV304 endothelium cell line, cells were seeded into triplicate wells of 96-well plates at a density of 2000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of VEGFA. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10μ of CCK-8 solution was added to each well of the plate, then measure the absorbance at 450nm using a microplate reader after incubating the plate for 1-4 hours at 37°C. Cell proliferation of ECV304 cells after incubation with VEGFA for 72h observed by inverted microscope. VEGFA significantly promoted cell proliferation of ECV304 cells. The ED₅₀ for this effect is typically 5. 58-9. 98 ng/ml.

Observed MW (kDa) 22 kDa.

Properties		
Form	Lyophilized powder	
Buffer	Reconstitute with 10mM PBS (pH7.4) to 0.1-1.0mg/ml. Do not vortex. Lyophilized from PBS (pH7.4), 0.01% SKL, 1mM DTT, 5% Trehalose.	
Preservative	ProClin 300	
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.	
Region/Sequence	N-terminal His-Tag; Ala27~Arg190 (NP_001103804.1)	
Expression System	HEK293 cells	
Purity	> 97%	
Endotoxin	< 1 EU/μg	
Conjugation	Unconjugated	
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.	

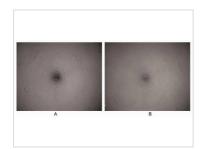


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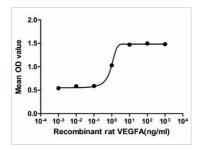
DATA IMAGES



GTX00343-pro Functional Assay Image

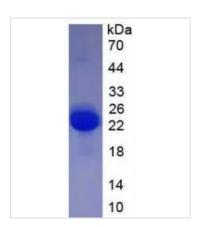
Cell proliferation effect of GTX00343-pro Rat VEGFA protein (active).

- (A) Unstimulated ECV-304 cells cultured in serum-free DMEM for 72hrs.
- (B) ECV-304 cells cultured in serum-free DMEM, stimulated with 10 ng/ml VEGFA for 72hrs.



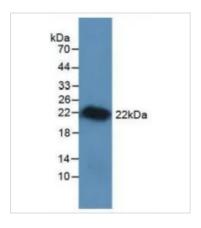
GTX00343-pro Functional Assay Image

The dose effect curve of GTX00343-pro Rat VEGFA protein (active) on ECV-304 cells. After incubation of Rat VEGFA protein (active) for 72 hrs, cell proliferation was measured by Cell Counting Kit-8 (CCK-8).



GTX00343-pro Image

SDS-PAGE analysis of GTX00343-pro Rat VEGFA protein (active).



GTX00343-pro Image

WB analysis of GTX00343-pro Rat VEGFA protein (active).



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