

Human SEMA3F protein, His tag (active)

Cat. No. GTX00267-pro

Applications	Functional Assay	Package 10 μg
Species	Human	13

Applications

Application Note

Semaphorin-3F (SEMA3F) is a member of semaphorins family. All the family members have a secretion signal, a 500-amino acid sema domain, and 16 conserved cysteine residues. Semaphorins not only guide axons in development, but also have major roles in immune function (classes 4, 6, and 7) and the development of bones. Class 3 semaphorins are one of the most versatile semaphorin classes, in which Sema3a is the most studied. Besides, SEMA3F is deleted or downregulated in many metastatic tumors. To test the effect of SEMA3F on inhibit cell proliferation, human lung carcinoma cells A549 were seeded into triplicate wells of 96-well plates at a density of 5000 cells/well and allowed to attach, replaced with serum-free overnight, then the medium was replaced with 2% serum standard DMEM prior to the addition of various concentrations of recombinant human SEMA3F. After incubated for 48h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Proliferation of A549 cells after incubation with SEMA3F for 48h observed by inverted microscope. Cell viability was assessed by CCK-8 assay after incubation with recombinant SEMA3F for 48h. And SEMA3F significantly increased cell viability of A549 cells.

Observed MW (kDa) 16 kDa.

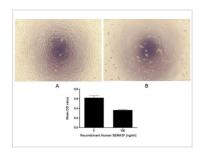
Properties		
Form	Lyophilized powder	
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.	
Preservative	ProClin 300	
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.	
Region/Sequence	N-terminal His-Tag; Val350~Leu483 (NP_001305729.1)	
Expression System	E. coli	
Purity	> 95%	
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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Date 2026 / 01 / 01 Page 1 of 2

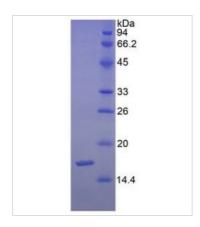
DATA IMAGES



GTX00267-pro Functional Assay Image

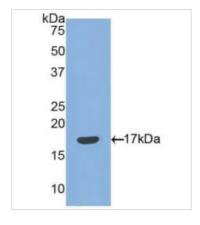
Cell suppression effect of GTX00267-pro Human SEMA3F protein (active). Cell viability was measured by Cell Counting Kit-8 (CCK-8).

- (A) Unstimulated A549 cells cultured in DMEM for 48hrs.
- (B) A549 cells cultured in DMEM, stimulated with 100 ng/ml SEMA3F for 48hrs.



GTX00267-pro Image

SDS-PAGE analysis of GTX00267-pro Human SEMA3F protein (active).



GTX00267-pro Image

WB analysis of GTX00267-pro Human SEMA3F protein (active).



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Date 2026 / 01 / 01 Page 2 of 2