

Regenerating Islet Derived Protein 3 Alpha Active Protein | REG3a active protein

Active Regenerating Islet Derived Protein 3 Alpha (REG3a)

CATALOG #
AAA150135

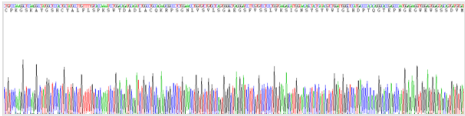
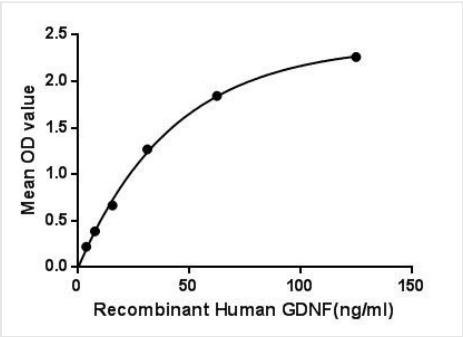
APPLICATIONS
Activity Assay, Cell Culture

PRODUCT SYNONYMS

Regenerating Islet Derived Protein 3 Alpha; Active Regenerating Islet Derived Protein 3 Alpha (REG3a); HIP; INGAP; PAP-H; PAP1; PBCGF; REG-III; REG3; Pancreatitis-Associated Protein; Hepatointestinal pancreatic protein; Human proislet peptide; Pancreatitis-associated protein 1; REG3a active protein

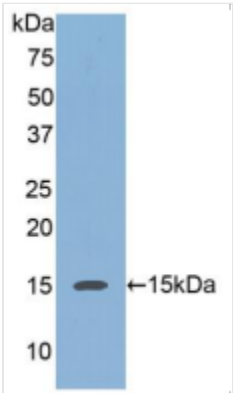
PRODUCT SPECIFICATIONS

Purity/Purification	>95%
Form/Format	Freeze-dried powder 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Cys40~Val170
Sequence Length	175
Applicable Applications for REG3a active protein	Activity Assay, Cell Culture
Species	Human
Tag	N-terminal His Tag
Subcellular Location	Secreted
Isoelectric Point	7.8
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. Stability: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

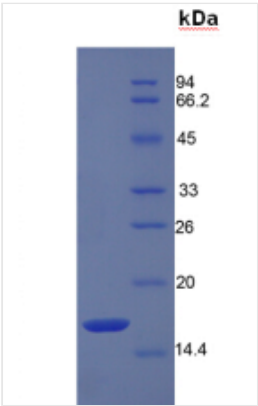


Gene Sequencing
Figure. Gene Sequencing (Extract)

Bioactivity
Figure. The binding activity of GDNF with GFRa2. Glial cell-derived neurotrophic factor (GDNF) is a small protein that potently promotes the survival of many types of neurons. This protein was shown to promote the survival and differentiation of dopaminergic neurons in culture, and was able to prevent apoptosis of motor neurons induced by axotomy. GDNF is processed to a mature secreted form that exists as a homodimer. The mature form of the protein is a ligand for the product of the RET (rearranged during transfection) protooncogene. Besides, Glial Cell Line Derived Neurotrophic Factor Receptor Alpha 2 (GFRa2) has been identified as an interactor of GDNF, thus a binding ELISA assay was conducted to detect the interaction of recombinant human GDNF and recombinant human GFRa2. Briefly, GDNF were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to GFRa2-coated microtiter wells and incubated for 2h at 37. Wells were washed with PBST and incubated for 1h with anti-GDNF pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of GDNF and GFRa2 was shown in Figure 1, and this effect was in a dose dependent manner.



WB (Western Blot)
Figure. Western Blot



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for REG3a active protein	Infection immunity
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4505605
NCBI GeneID	5068
NCBI Accession #	NP_002571.1
NCBI GenBank Nucleotide #	NP_002571.1
UniProt Accession #	Q06141

Molecular Weight	Predicted Molecular Mass: 16.0kDa Accurate Molecular Mass: 15kDa
NCBI Official Full Name	regenerating islet-derived protein 3-alpha
NCBI Official Synonym Full Names	regenerating family member 3 alpha
NCBI Official Symbol	REG3A
NCBI Official Synonym Symbols	HIP; PAP; PAP1; REG3; INGAP; PAP-H; PBCGF; HIP/PAP; REG-III
NCBI Protein Information	regenerating islet-derived protein 3-alpha
UniProt Protein Name	Regenerating islet-derived protein 3-alpha
UniProt Gene Name	REG3A
UniProt Synonym Gene Names	HIP; PAP; PAP1; REG-3-alpha; HIP/PAP
UniProt Entry Name	REG3A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/reg3a-active-protein/regenerating-islet-derived-protein-3-alpha/150135>