

Fibroblast Growth Factor 12 (FGF12) Active Protein | FGF12 active protein

Active Fibroblast Growth Factor 12 (FGF12)

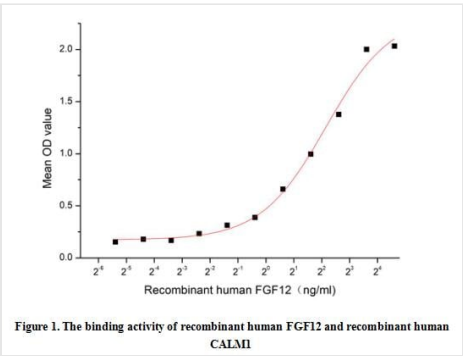
CATALOG # AAA161897	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Fibroblast Growth Factor 12 (FGF12); Active Fibroblast Growth Factor 12 (FGF12); Fibroblast Growth Factor 12; FGF12B; FHF1; Fibroblast Growth Factor Homologous Factor 1; Myocyte-Activating Factor4; FGF12 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Met1~Thr18 1
Applicable Applications for FGF12 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	8.6
Research Area	Cytokine
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

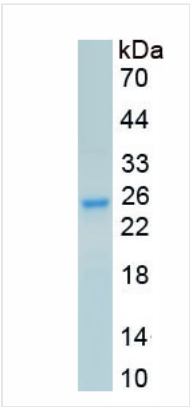


Bioactivity

Fibroblast Growth Factor 12 (FGF12) is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth, and invasion. Fibroblast Growth Factor 12 (FGF12) may represent an important modulator of neuronal network activity and has been associated with developmental and epileptic encephalopathy (DEE). Besides, it is reported that both domains of (Ca²⁺)₄-CaM directly bind two sites in the N-terminal domain (NTD) of A-type FGF splice variants (FGF11A, FGF12A, FGF13A, and FGF14A) with high affinity. Calmodulin 1 (CALM1) has been identified as an interactor of FGF12, thus a binding ELISA assay was conducted to detect the interaction of recombinant human FGF12 and recombinant human CALM1. Briefly, FGF12 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to CALM1-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-FGF12 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 μ L stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant human FGF12 and recombinant human CALM1 was shown in Figure 1, the EC50 for this effect is 4.44 μ g/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for FGF12 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	47117683
NCBI GeneID	2257
UniProt Accession #	P61328; O35339; P70376; Q8TBG5; Q92912; Q93001; B2R6B7; B2R976
Molecular Weight	181
NCBI Official Full Name	Fibroblast growth factor 12
NCBI Official Synonym Full Names	fibroblast growth factor 12
NCBI Official Symbol	FGF12
NCBI Official Synonym Symbols	FHF1; FGF12B
NCBI Protein Information	fibroblast growth factor 12; FHF-1; FGF-12; myocyte-activating factor; fibroblast growth factor 12B; fibroblast growth factor FGF-12b; fibroblast growth factor homologous factor 1
UniProt Protein Name	Fibroblast growth factor 12
UniProt Gene Name	FGF12
UniProt Synonym Gene Names	FGF12B; FHF1; FGF-12; FHF-1
UniProt Entry Name	FGF12_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/e-coli-active-protein/fibroblast-growth-factor-12-fgf12/161897>