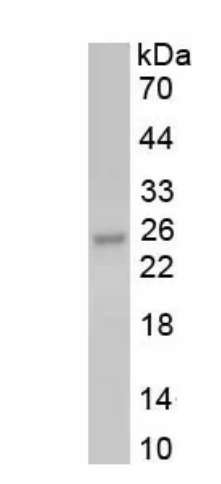
Active Fibroblast Growth Factor 12 (FGF12)

Catalog#:PEH12874

概述（Summary）

别称（Alternative Names）	FGF12B; FHF1; Fibroblast Growth Factor Homologous Factor 1; Myocyte-Activating Factor
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Met1-Thr181】
Accession #	P61328
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	24.1 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Involved in nervous system development and function. Involved in the positive regulation of voltage-gated sodium channel activity. Promotes neuronal excitability by elevating the voltage dependence of neuronal sodium channel SCN8A fast inactivation.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

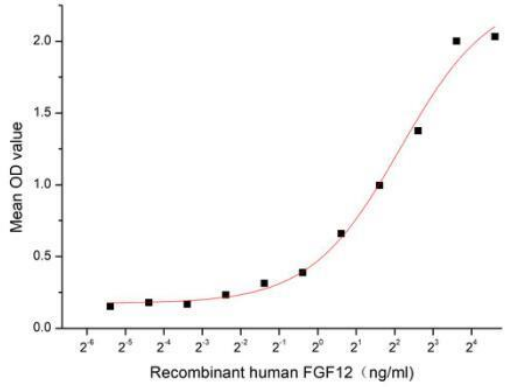


Figure 1. The binding activity of recombinant human FGF12 and recombinant human CALM1

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 µl were then transferred to CALM1-coated microtiter wells and incubated for 1h at 37℃. 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℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µL 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 ug/mL.

注意事项（Note）

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