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Product Datasheet

Human PAM protein, His tag, Unconjugated GTX00180-PRO

Article Name	Human PAM protein, His tag, Unconjugated
Biozol Catalog Number	GTX00180-PRO
Supplier Catalog Number	GTX00180-pro
Alternative Catalog Number	GTX00180-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	5066
UniProt	P19021
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, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Phe21~Cys288 (NP_000910.2)

Application Notes

Peptidyl-glycine alpha-amidating monooxygenase (PAM) is an enzyme that is required for the biosynthesis of many signaling peptides. This enzyme mainly includes two domains with distinct catalytic activities, a peptidylglycine alpha-hydroxylating monooxygenase (PHM) domain and a peptidyl-alpha- hydroxyglycine alpha-amidating lyase (PAL) domain. These catalytic domains work sequentially to catalyze neuroendocrine peptides to active alpha-amidated products. Besides, Glucosidase Alpha, Acid (GaA) has been identified as an interactor of PAM, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PAM and recombinant human GaA. Briefly, PAM were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to GaA-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-PAM 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 37C. Finally, add 50 μ l stop solution to the wells and read at 450nm immediately. The binding activity of PAM and GaA was in a dose dependent manner.