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## Product Datasheet

### Mouse TGM1 protein, His and GST tag, Unconjugated GTX00315-PRO

Article Name	Mouse TGM1 protein, His and GST tag, Unconjugated
Biozol Catalog Number	GTX00315-PRO
Supplier Catalog Number	GTX00315-pro
Alternative Catalog Number	GTX00315-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Mouse
Conjugation	Unconjugated
NCBI	<a href="#">21816</a>
UniProt	<a href="#">Q9JLF6</a>
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 and GST-Tag, Leu337~Arg607 (NP_001155186.1)

Application Notes

Transglutaminase 1(TGM1) is an enzyme found in cells that make up the outermost layer of the skin (the epidermis). It can catalyze the addition of an alkyl group from an alkylamine to a glutamine residue of a protein, forming an alkylglutamine in the protein. TGM1 is involved in the formation of the cornified cell envelope, which is a structure that surrounds skin cells and helps form a protective barrier between the body and its environment. Besides, Synuclein Alpha (SNCa) has been identified as an interactor of TGM1, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse TGM1 and recombinant mouse SNCa. Briefly, TGM1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to SNCa-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-TGM1 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 µl stop solution to the wells and read at 450nm immediately. The binding activity of TGM1 and SNCa was in a dose dependent manner.