

Tgm2, 1-686aa, Mouse, His tag, E.coli

Cat.NO.: TP04195

3th Edition

Synonyms:Protein-glutamine gamma-glutamyltransferase 2, G[a]h, TG2, TGase2, tTG, tGAs

Description:Tgm2, also known as protein-glutamine gamma-glutamyltransferase 2 is calcium dependent enzyme of the protein-glutamine gamma-glutamyltransferases family. Like other transglutaminases, it crosslinks proteins between an epsilon-amino group of a lysine residue and a gamma-carboxamide group of glutamine residue, creating an inter- or intramolecular bond that is highly resistant to proteolysis (protein degradation). Aside from its crosslinking function, tTG catalyzes other types of reactions including deamidation, GTP-binding/hydrolyzing, and isopeptidase activities. Unlike other members of the transglutaminase family, tTG can be found both in the intracellular and the extracellular spaces of various types of tissues and is found in many different organs including the heart, the liver, and the small intestine. Recombinant mouse Tgm2 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form:Liquid, In Phosphate buffered saline (pH7.4) containing 10% glycerol, 1mM DTT

Molecular Weight:79.4kDa (709aa)

Sequences:

MGSSHHHHHHSSGLVPRGSHMGSM AEELLRLERCDLEIQANGRDHHTADLCQEKLVLRRGQRFRLTLYFEGRGYE
ASVDSLTFGAVTGPDPSEEAGTKARFSLSDNVEEGSWSASVLDQQDNVLSLQLCTPANAPIGLYRLSLEASTGYQG
SSFVLGHFILLYNWCPADDVYLDSEERREYVLTQQGFIYQGSVKFIKSVPNWFGQFEDGILDTCLMLLDMNPKFL
KNRSRDCSRSSPIYVGRVVSAMVNCNDDQGVLLGRWDNNGYDGISPMWIGSVDILRRWKEHGCQQVKYGGC
WVFAAVACTVLRCLGIPTRVVTNYNSAHDQNSNLLIEYFRNEFGELESNKSEMIWNFHCWVESWMTRPDLQPGYE
GWQAIDPTPQEKSEGTYCCGPVSVRAIKEGDLSTKYDAPFVFAEVNADVVDWIRQEDGSVLKSINRSLVVGQKIST
KSVGRDDREDITHYKYYPEGSPEEREVFTKANHLNKLAEKEETGVAMRIRVGDSMSMGNDFDVFAHIGNDTSETR
ECRLLLCARTVSYNGVLGPECGTEDINLTDPYSENSIPLRILYEKYSGLTESNLIKVRGLLIEPAANSYLLAERDLYL
ENPEIKIRVLGEPKQNRKLVAEVS LKNPLSDPLYDCIFTVEGAGLTKEQKSVEVSDPVPAGDLVKARVDLFPDGLH
KLVVNFQCDKLKSVKGYRNVIIGPA

Purity:> 95% by HPLC

Concentration:0.5mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.