Mouse TGF-beta 2 / TGFB2 Protein (His Tag)

Catalog Number: **50153-M08H**

General Information

Gene Name Synonym:

BB105277; TGF-beta 2; Tgf-beta2; Tgfb-2; TGFB2

Protein Construction:

A DNA sequence encoding the mouse Tgfb2 (NP_033393.2) (Met1-Ser414) was expressed with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg protein as determined by the LAL method.

Predicted N terminal: Ser 20

Molecular Mass:

The recombinant mouse Tgfb2 consists 406 amino acids and predicts a molecular mass of 46.9 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

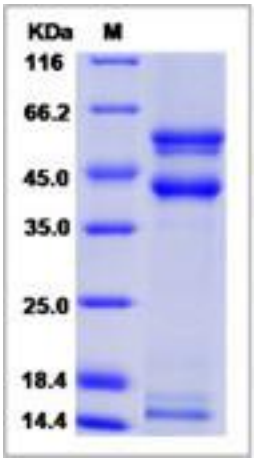
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

TGF beta 2 (Transforming growth factor beta 2), an extracellular glycosylated protein, which belongs to the TGF-beta family. TGF-beta regulates key mechanisms of tumor development, namely immunosuppression, metastasis, angiogenesis, and proliferation. TGF beta 2 suppression is a promising therapeutic approach for malignant tumor therapy. The signaling pathway of TGF beta 2/Smad plays an important role in the pathological process in posterior capsule opacification (PCO) after cataract surgery. Silencing Smad2 and Smad3 efficiently blocked the effect of TGF beta 2 on cell proliferation, migration, and extracellular matrix production. TGF beta 2 activation of MEKK3/ERK1/2/5 signaling modulates Has2 expression and hyaluronan (HA) production leading to the induction of epithelial to mesenchymal transformation (EMT) events. In addition, the upregulation of the TGF beta 2 level is a common pathological feature of Alzheimer's disease (AD) brains and suggests that it may be closely linked to the development of neuronal death related to AD.

References

1.Schlingensiepen KH, et al. (2006) Targeted tumor therapy with the TGF-beta 2 antisense compound AP 12009. Cytokine Growth Factor Rev. 17(1-2): 129-39.
2.Ghatpande SK, et al. (2010) Transforming growth factor beta2 is negatively regulated by endogenous retinoic acid during early heart morphogenesis. Dev Growth Differ. 52(5): 433-55.
3.Noguchi A, et al. (2010) Transforming growth factor beta2 level is elevated in neurons of Alzheimer's disease brains. Int J Neurosci. 120(3): 168-75.