

Mouse TMEM106B Protein

Cat. No. TEM-MM26B

Description

Source	Recombinant Mouse TMEM106B Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Pro119-Gln275.
Accession	Q80X71
Molecular Weight	The protein has a predicted MW of 44.8 kDa. Due to glycosylation, the protein migrates to 65-68 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

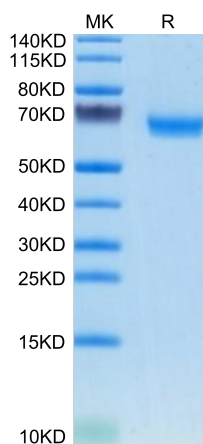
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

TMEM106B is a well-recognised risk factor for FTD caused by GRN mutation. Elegant experiments have suggested that increased risk for FTD is due to elevated levels of TMEM106B (Nicholson et al, 2013; Gallagher et al, 2017). Therefore, recent work has explored the therapeutic potential of reducing TMEM106B levels, with initial results looking encouraging, as crossing a Grn-deficient mouse to a Tmem106b knockout showed a rescue in FTD-related behavioural defects and specific aspects of lysosome dysfunction (Klein et al, 2017).

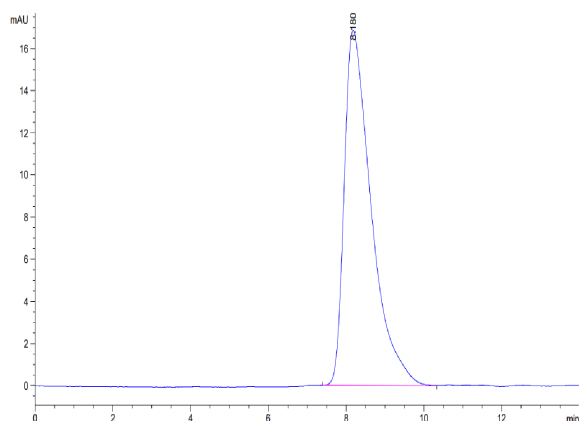
Assay Data

Bis-Tris PAGE



Mouse TMEM106B on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Mouse TMEM106B is greater than 95% as determined by SEC-HPLC.