

Datasheet for ABIN6700705
Thrombopoietin Protein (THPO)



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2 Images

Overview

Quantity:	10 µg
Target:	Thrombopoietin (THPO)
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Mouse Thrombopoietin Recombinant Protein
Purification:	Thrombopoietin purity was determined to be greater than 97% as determined by reducing and non-reducing SDS-PAGE.
Purity:	97,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is determined by the dose-dependent stimulation of MO7e cells and is typically less than 1 ng/mL.

Target Details

Target:	Thrombopoietin (THPO)
Alternative Name:	Thpo (THPO Products)
Background:	Synonyms: C-mpl ligand (ML), Megakaryocyte Colony Stimulating Factor, Megakaryocyte growth and development factor (MGDF), Myeloproliferative leukemia virus oncogene ligand, c-

Target Details

MPL ligand

Background: Thrombopoietin (TPO) is a growth factor that is produced by the liver and kidney. TPO acts through the TPO receptor to promote megakaryocyte maturation and differentiation, which leads to the production of platelets. Recombinant mouse TPO is a non-glycosylated protein, containing 174 amino acids (which comprise the receptor binding domain), with a molecular weight of 18.7 kDa.

UniProt: [P40226](#)

Pathways: [JAK-STAT Signaling](#), [Hormone Activity](#)

Application Details

Application Notes: Other: User Optimized

Application_Note: Thrombopoietin Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Thrombopoietin in immunological assays.

Comment: Suggested_Applications: Cellular Assay

Other_Performance_Data:

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitution_Buffer: Restore with deionized water (or equivalent)

Reconstitution_Volume: 10 µL (10-100 µL)

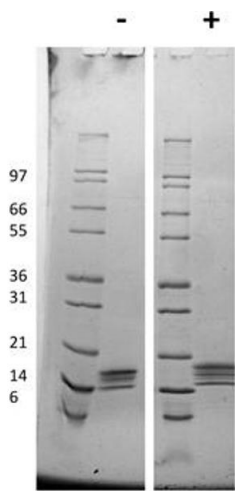
Buffer: Buffer: 0.01 M Sodium Phosphate, pH 7.5

Stabilizer: None

Preservative: Without preservative

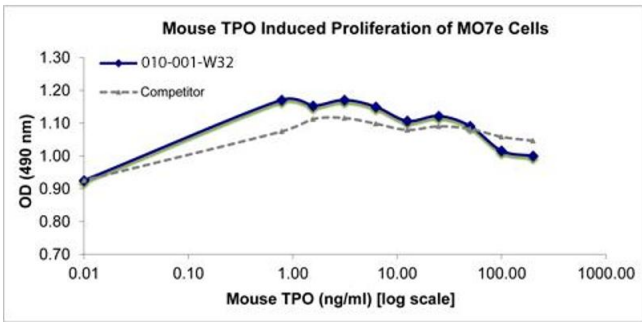
Storage: 4 °C, -20 °C

Storage Comment: Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.



SDS-PAGE

Image 1. SDS-PAGE of Mouse Thrombopoietin Recombinant Protein. Lane 1: Molecular weight marker. Lane 2: 1 µg Mouse TPO in non-reducing conditions. Lane 3: Molecular weight marker. Lane 4: 1 µg Mouse TPO in reducing conditions (+). Mouse TPO has a predicted MW of 18.7 kDa.



SDS-PAGE

Image 2. SDS-PAGE of Mouse Thrombopoietin Recombinant Protein Bioactivity of Mouse Thrombopoietin Recombinant Protein. Serial dilutions of Mouse TPO, starting at 200 ng/mL, were added to MO7e cells growing in the presence of 1 ng/mL IL-3 and 2.5 ng/mL SCF. Proliferation was measure after 5 days and the linear portion of the curve was us used to calculate the ED50. The ED50 of Mouse TPO is less than 0.8 ng/mL. This value is comparable to the typical expected range of 1 ng/mL.