

Datasheet for 010-001-W32-0100**rMouse Thrombopoietin Protein****Overview**

Description:	Mouse Thrombopoietin Recombinant Protein - 010-001-W32-0100
Item No.:	010-001-W32-0100
Size:	100 µg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Mouse
Expressed in:	E. coli

Product Details

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.
Synonyms:	C-mpl ligand (ML), Megakaryocyte Colony Stimulating Factor, Megakaryocyte growth and development factor (MGDF), Myeloproliferative leukemia virus oncogene ligand, c-MPL ligand
Species of Origin:	Mouse
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	Thpo
Purity/Specificity:	Thrombopoietin purity was determined to be greater than 97% as determined by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - P40226

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein. Biologic Activity: The activity is determined by the dose-dependent stimulation of MO7e cells and is typically less than 1 ng/mL.

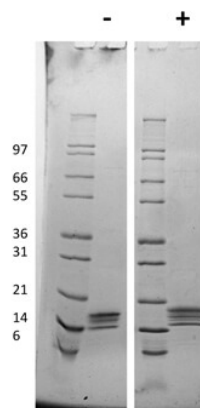
Formulation

Physical State:	Lyophilized
Concentration:	0.1mg/ml
Buffer:	0.01 M Sodium Phosphate, pH 7.5
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	100 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

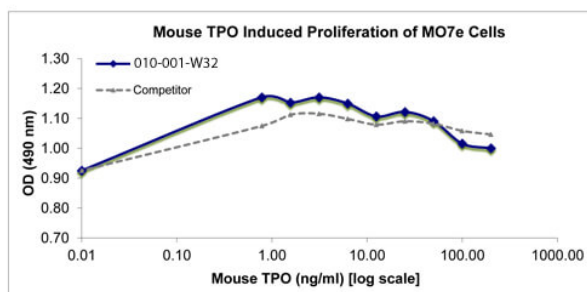
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results 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.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

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

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 measured after 5 days and the linear portion of the curve was 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.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.