# abcam

## Product datasheet

# Recombinant rat Thrombopoietin protein ab129140

**Description** 

**Product name** Recombinant rat Thrombopoietin protein

**Biological activity** Determined by its ability to stimulate the proliferation of Human MO7e cells. The expected ED<sub>50</sub> is

= 0.2 ng/ml, corresponding to a specific activity of =  $5 \times 10^6 \text{ units/mg}$ .

Purity > 98 % SDS-PAGE.

Purity: > 98% by SDS-PAGE and HPLC analysis.

**Expression system** Escherichia coli

Accession P49745

Protein length Protein fragment

Animal free No

Nature Recombinant

**Species** Rat

**Sequence** SPVPPACDPR LLNKLLRDSY LLHSRLSQCP

DVNPLSIPVL LPAVDFSLGE WKTQTEQSKA QDILGAVSLL LEGVMAARGQ LEPSCLSSLL GQLSGQVRLL LGALQGLLGT QLPPQGRTTA HKDPSALFLS LQQLLRGKVR FLLLVEGPAL

CVRRTLPTTA VPSRTSQLLT LNKF

Predicted molecular weight 19 kDa

### **Specifications**

Our <u>Abpromise guarantee</u> covers the use of ab129140 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** Functional Studies

SDS-PAGE

**HPLC** 

Form Lyophilized

Additional notes Endotoxin level: < 0.1 ng/µg of Thrombopoietin protein.

**Preparation and Storage** 

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Stability and Storage Shipped at 4°C. The lyophilized protein is stable for a few weeks at room temperature. Store at -

20°C long term.

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution Reconstituted ab129140 should be stored in working aliquots at -20°C. Avoid repeated freeze-

thaw cycles.

#### **General Info**

**Function** Lineage-specific cytokine affecting the proliferation and maturation of megakaryocytes from their

committed progenitor cells. It acts at a late stage of megakaryocyte development. It may be the

major physiological regulator of circulating platelets.

Involvement in disease Defects in THPO are a cause of essential thrombocythemia (ET) [MIM:187950]. ET is inherited as

an autosomal dominant trait which is characterized by elevated platelet levels due to sustained

proliferation of megakaryocytes, and frequently lead to thrombotic and haemorrhagic

complications.

**Sequence similarities**Belongs to the EPO/TPO family.

**Domain**Two-domain structure with an erythropoietin-like N-terminal and a Ser/Pro/Thr-rich C-terminal.

Cellular localization Secreted.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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