

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Thrombopoietin R/Tpo R in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human Tpo R is observed and less than 2% cross-reactivity with recombinant mouse Epo R is observed
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Thrombopoietin R/Tpo R Ser18-Trp483 Accession # CAA52031
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Thrombopoietin receptor (Tpo R), also known as myeloproliferative leukemia protein (*c-mpl*), is a type I membrane protein that is a member of the hematopoietin/cytokine receptor superfamily. Thrombopoietin (Tpo) is a key regulator of megakaryocytopoiesis and thrombopoiesis *in vitro* and *in vivo*. Receptor dimerization occurs upon ligand binding. Downstream signaling cascades utilize the Ras/MAP and JAK/STAT pathways (1). In humans, variations at the 3' end on the molecule result in the formation of 3 distinct mRNA species, a P-form, a K-form, and a potentially secreted form. The predominant form in humans is the P-form, which encodes a full length receptor. In mouse, mRNA for a full length form, a potentially secreted form, and a form lacking 8 amino acids in the extra-cytoplasmic domain has been detected (2). The human and mouse receptors share approximately 81% amino acid identity. Tpo R is expressed at low levels in various cell types including hematopoietic progenitor cells, megakaryocytes and platelets.

PRODUCT SPECIFIC NOTICES

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