

c-Mpl (N-20): sc-13187

BACKGROUND

Thrombopoietin (TPO or THPO), also known as c-Mpl ligand (c-Mpl L), is a cytokine that plays a central role in megakaryopoiesis by influencing the development and maturation of megakaryocytes and platelet production from hematopoietic stem cells. TPO exerts its biological effects through the TPO receptor, c-Mpl. c-Mpl is a member of the cytokine receptor superfamily. Expression of c-Mpl is restricted to hematopoietic tissues and cells, such as bone marrow, spleen, fetal liver and CD34⁺ cells. Stimulation of c-Mpl with TPO results in the activation of the Janus tyrosine kinase family members, Tyk 2 and JAK2, which in turn phosphorylate Stat5 and Stat3, causing their nuclear translocation and the transcription of Stat responsive genes. Mutations in c-Mpl have been implicated as the cause of certain human disorders, including congenital amegakaryocytic thrombocytopenia (CAMT) and thrombocytopenia with absent radii (TAR) syndrome.

CHROMOSOMAL LOCATION

Genetic locus: MPL (human) mapping to 1p34.2; Mpl (mouse) mapping to 4 D2.1.

SOURCE

c-Mpl (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of c-Mpl of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-13187 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

c-Mpl (N-20) is recommended for detection of c-Mpl of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

c-Mpl (N-20) is also recommended for detection of c-Mpl in additional species, including canine and porcine.

Suitable for use as control antibody for c-Mpl siRNA (h): sc-29853, c-Mpl siRNA (m): sc-29854, c-Mpl shRNA Plasmid (h): sc-29853-SH, c-Mpl shRNA Plasmid (m): sc-29854-SH, c-Mpl shRNA (h) Lentiviral Particles: sc-29853-V and c-Mpl shRNA (m) Lentiviral Particles: sc-29854-V.

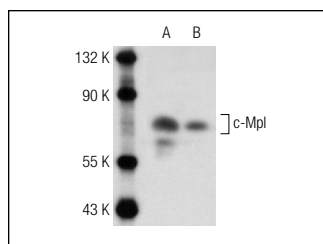
Molecular Weight of c-Mpl: 71 kDa.

Positive Controls: AML-193 whole cell lysate: sc-364182, Daudi cell lysate: sc-2415 or U266 whole cell lysate: sc-364800.

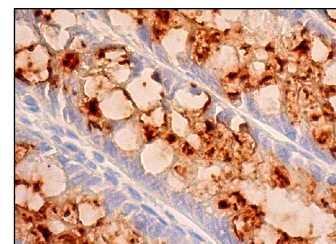
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



c-Mpl (N-20): sc-13187. Western blot analysis of c-Mpl expression in Daudi (A) and U266 (B) whole cell lysates.



c-Mpl (N-20): sc-13187. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing cytoplasmic staining of glandular cells.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **c-Mpl (E-7): sc-377417**, our highly recommended monoclonal alternative to c-Mpl (N-20).