**BACKGROUND**

Patients with polycythemia vera (PV), a neoplastic stem cell disorder that leads to excessive production of all myeloid cell lines, overexpress the cell surface antigen CD177, also designated NB1. The increased output, especially of red blood cells, increases whole blood viscosity and causes vascular occlusion and ischemia. Because of the marked upregulation of CD177 in PV patients, as compared to healthy individuals or those with other erythrocytosis-related conditions, analysis of this protein presents a useful tool for diagnosis and research into the mechanisms of PV.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CD177 (human) mapping to 19q13.31; Cd177 (mouse) mapping to 7 A3.

**SOURCE**

CD177 (C-5) is a mouse monoclonal antibody raised against amino acids 27-247 mapping within an internal region of CD177 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**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 website at www.scbt.com for detailed protocols and support products.

**APPLICATIONS**

CD177 (C-5) is recommended for detection of CD177 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for CD177 siRNA (h): sc-105189, CD177 siRNA (m): sc-142181, CD177 shRNA Plasmid (h): sc-105189-SH, CD177 shRNA Plasmid (m): sc-142181-SH, CD177 shRNA (h) Lentiviral Particles: sc-105189-V and CD177 shRNA (m) Lentiviral Particles: sc-142181-V.

Molecular Weight of CD177: 58-64 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or MCF7 whole cell lysate: sc-2206.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**DATA**

**SELECT PRODUCT CitATIONS**


**RESEARCH USE**

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