# CPXM2 (N-17): sc-136633



The Power to Question

#### **BACKGROUND**

Members of the M14 metallocarboxypeptidase protein family serve many diverse functions and are divided into three subfamilies based on structure, function and amino acid sequence similarity. Belonging to the N/E subfamily, CPXM2 (inactive carboxypeptidase-like protein X2) is a 756 amino acid protein that contains a F5/8 type C domain and is secreted. Most members of the N/E subfamily contain several domains, including an active carboxypeptidase domain and signal peptide, and are thought to function mostly in protein-protein interactions and/or protein-membrane interactions, thereby targeting the protein to specific locations within the secretory pathway. CPXM2 is a unique member of this subfamily in that it does not appear to exhibit any enzymatic activity due to lack of several active-site residues that are present in the catalytic domain of other members of the N/E subfamily. Expression of the closely related protein CPXM is regulated during osteoclastogenesis, suggesting that CPXM may play a role in osteoclast differentiation.

## **REFERENCES**

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#### CHROMOSOMAL LOCATION

Genetic locus: CPXM2 (human) mapping to 10q26.13.

#### **SOURCE**

CPXM2 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CPXM2 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136633 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

CPXM2 (N-17) is recommended for detection of CPXM2 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with CPXM.

Suitable for use as control antibody for CPXM2 siRNA (h): sc-90646, CPXM2 shRNA Plasmid (h): sc-90646-SH and CPXM2 shRNA (h) Lentiviral Particles: sc-90646-V.

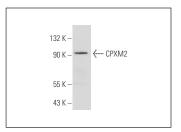
Molecular Weight of CPXM2: 86 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209.

#### **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.

### **DATA**



CPXM2 (N-17): sc-136633. Western blot analysis of CPXM2 expression in HL-60 whole cell lysate.

# STORAGE

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

#### **RESEARCH USE**

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