

#### **TRAP Antibody**

Catalog # ASC11500

## **Specification**

#### **TRAP Antibody - Product Information**

Application WB, IF
Primary Accession P13686
Other Accession NP 001

Other Accession
Reactivity
NP\_001104505, 161377453
Human, Mouse

Host Rabbit Clonality Polyclonal Isotype IgG

Application Notes TRAP antibody can be used for detection of

TRAP by Western blot at 1 µg/mL. For immunofluorescence start at 20 µg/mL.

#### **TRAP Antibody - Additional Information**

Gene ID 54

Target/Specificity

ACP5;

#### **Reconstitution & Storage**

TRAP antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

TRAP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **TRAP Antibody - Protein Information**

#### Name ACP5

#### **Function**

Involved in osteopontin/bone sialoprotein dephosphorylation. Its expression seems to increase in certain pathological states such as Gaucher and Hodgkin diseases, the hairy cell, the B-cell, and the T- cell leukemias.

#### **Cellular Location**

Lysosome.

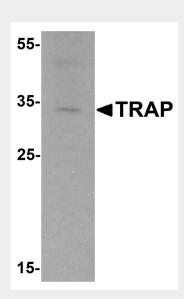
# **TRAP Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

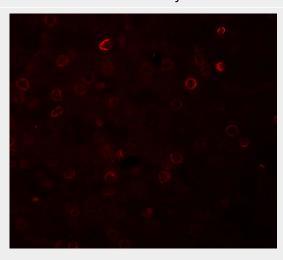


- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

#### **TRAP Antibody - Images**



Western blot analysis of TRAP in mouse brain tissue lysate with TRAP antibody at 1 µg/mL.

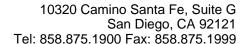


Immunofluorescence of TRAP in human liver tissue with TRAP antibody at 20 µg/mL.

## **TRAP Antibody - Background**

TRAP Antibody: TRAP, also known as uteroferrin, is an iron containing, glycosylated, acid phosphatase. It is the most basic of the acid phosphatases and is the only form not inhibited by L(+)-tartrate. Along with the related protein ACP2, TRAP mediates the removal of mannose 6-phosphate residues from proteins targeted to lysosomes. TRAP is present in brain at low levels, but is expressed at a much higher level in liver.

## **TRAP Antibody - References**





Baumbach GA, Saunders PT, Bazer FW, et al. Uteroferrin has N-apsaragine-linked high mannose-type oligosaccharaides that contain mannose 6-phosphate. Proc. Natl. Acad. Sci. USA 1984; 81:2985-9.

Sun P, Sleat DE, Lecocq M, et al. Acid phosphatase 5 is responsible for removing the mannose 6-phosphate recognition marker from lysosomal proteins. Proc. Natl. Acad. Sci. USA 2004; 105:16590-5.

Makypridi G, Damme M, Muller-Loennies S, et al. Mannose 6 dephosphorylation of lysosomal proteins mediated by acid phosphatases Acp2 and Acp5. Mol. Cell Biol. 2012; 32:774-82.