

## VPS53 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8546a

# **Specification**

## VPS53 Antibody (N-term) - Product Information

Application WB, IHC-P, FC,E

Primary Accession <u>Q5VIR6</u>

Other Accession
Reactivity

OBCCB4, Q5ZLD7
Human, Mouse

Predicted Chicken
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 94405
Antigen Region 111-140

# VPS53 Antibody (N-term) - Additional Information

#### **Gene ID 55275**

#### **Other Names**

Vacuolar protein sorting-associated protein 53 homolog, VPS53

#### Target/Specificity

This VPS53 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 111-140 amino acids from the N-terminal region of human VPS53.

#### **Dilution**

WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

VPS53 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### VPS53 Antibody (N-term) - Protein Information

## Name VPS53



**Function** Acts as a component of the GARP complex that is involved in retrograde transport from early and late endosomes to the trans-Golgi network (TGN). The GARP complex is required for the maintenance of the cycling of mannose 6-phosphate receptors between the TGN and endosomes, this cycling is necessary for proper lysosomal sorting of acid hydrolases such as CTSD (PubMed:15878329, PubMed:18367545). Acts as a component of the EARP complex that is involved in endocytic recycling. The EARP complex associates with Rab4-positive endosomes and promotes recycling of internalized transferrin receptor (TFRC) to the plasma membrane

#### **Cellular Location**

(PubMed: 25799061).

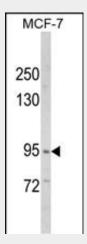
Golgi apparatus, trans-Golgi network membrane; Peripheral membrane protein. Endosome membrane; Peripheral membrane protein. Recycling endosome. Note=Localizes to the trans-Golgi network as part of the GARP complex, while it localizes to recycling endosomes as part of the EARP complex (PubMed:25799061)

## VPS53 Antibody (N-term) - Protocols

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

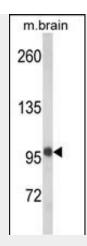
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## VPS53 Antibody (N-term) - Images



Western blot analysis of VPS53 Antibody (N-term) (Cat. #AP8546a) in MCF-7 cell line lysates (35ug/lane). VPS53 (arrow) was detected using the purified Pab.

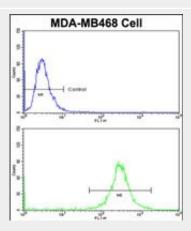




Western blot analysis of VPS53 Antibody (N-term) (Cat. #AP8546a) in mouse brain tissue lysates (35ug/lane). VPS53 (arrow) was detected using the purified Pab.



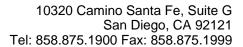
Formalin-fixed and paraffin-embedded human brain tissue reacted with VPS53 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of MDA-MB468 cells using VPS53 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram)FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# VPS53 Antibody (N-term) - Background

VPS53 is a protein with sequence similarity to the yeast Vps53p protein. Vps53p is involved in retrograde vesicle trafficking in late Golgi.





# VPS53 Antibody (N-term) - References

Ko,J.K., et.al., J. Cell. Sci. 120 (PT 16), 2912-2923 (2007) Zhu,J.D., et.al., Cell Res. 16 (9), 780-796 (2006)