

# Rabbit Anti-VPS4a antibody

# SL7777R

VPS4a
液泡分选蛋白4抗体
hVPS4; SKD1; SKD1 homolog; SKD2; Vacuolar protein sorting 4 homolog A; vacuo
sorting protein 4; VPS4.
Rabbit
Polyclonal
Human, Mouse, Rat, Dog, Pig, Rabbit,
WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-
500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.
48kDa
cytoplasmicThe cell membrane
Lyophilized or Liquid
1mg/ml
KLH conjugated synthetic peptide derived from human VPS4a:351-437/437
IgG
affinity purified by Protein A
0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
antibody is stable at room temperature for at least one month and for greater than a year
when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
antibody the antibody is stable for at least two weeks at 2-4 °C.
<u>PubMed</u>
Involved in intracellular protein transport probably out of a prevacuolar endosomal compartment. May be involved in the release of components of the bilayered coat from
dependent disassembly of the ESCRT-III complex. In case of infection, the HIV-1 virus
takes advantage of it for budding and exocytic cargos of viral proteins.

#### **Function:**

Involved in late steps of the endosomal multivesicular bodies (MVB) pathway. Recognizes membrane-associated ESCRT-III assemblies and catalyzes their disassembly, possibly in combination with membrane fission. Redistributes the ESCRT-III components to the cytoplasm for further rounds of MVB sorting. MVBs contain intraluminal vesicles (ILVs) that are generated by invagination and scission from the limiting membrane of the endosome and mostly are delivered to lysosomes enabling degradation of membrane proteins, such as stimulated growth factor receptors, lysosomal enzymes and lipids. In conjunction with the ESCRT machinery also appears to function in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis and enveloped virus budding (HIV-1 and other lentiviruses). Involved in cytokinesis.

# **Subunit:**

Proposed to be monomeric or homodimeric in nucleotide-free form and to oligomerize upon binding to ATP to form two stacked hexameric or heptameric rings with a central pore through which ESCRT-III substrates are translocated in an ATP-dependent manner (By similarity). Interacts with CHMP1A, CHMP1B, CHMP2A, CHMP2B, CHMP3, CHMP4A, CHMP4B, CHMP4C and CHMP6. Interacts with VPS4B; the interaction suggests a heteromeric assembly with VPS4B. Interacts with SPAST. Interacts with IST1.

#### **Subcellular Location:**

Prevacuolar compartment membrane; Peripheral membrane protein. Late endosome membrane; Peripheral membrane protein (Probable). Note=Membrane-associated in the prevacuolar endosomal compartment. Localizes to the midbody of dividing cells. Localized in two distinct rings on either side of the Fleming body.

# **Tissue Specificity:**

Ubiquitously expressed.

# Similarity:

Belongs to the AAA ATPase family.

Contains 1 MIT domain.

### **SWISS:**

O9UN37

#### Gene ID:

27183

## Database links:

Entrez Gene: 27183Human

Entrez Gene: 116733 Mouse

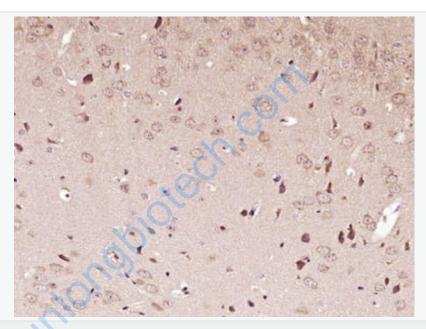
Entrez Gene: 246772Rat Omim: 609982Human SwissProt: Q9UN37Human SwissProt: Q8VEJ9Mouse SwissProt: Q793F9Rat <u>Unigene: 128420</u>Human Unigene: 236004 Mouse Unigene: 12477Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. VPS4a 35 ---Picture: 25 ---20 -17 ---Sample: U-87MG(Human) Cell Lysate at 30 ug NIH/3T3(Mouse) Cell Lysate at 30 ug

Primary: Anti-VPS4a (SL7777R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 48 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (VPS4a) Polyclonal Antibody, Unconjugated (SL7777R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.