

Rabbit OMP Polyclonal Antibody | anti-OMP antibody

Anti-OMP Antibody Picoband

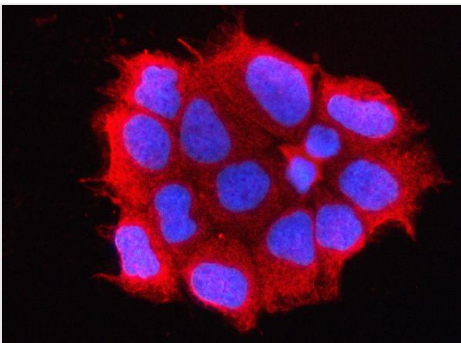
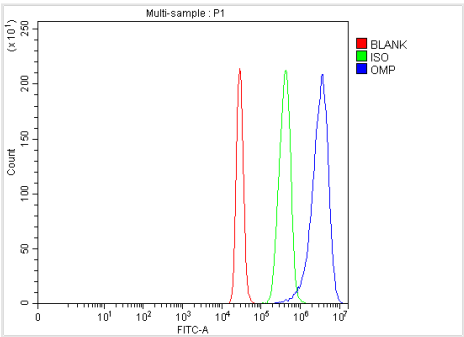
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127081	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

OMP; Polyclonal Antibody; Anti-OMP Antibody Picoband; Importin subunit alpha-1; Karyopherin subunit alpha-2; RAG cohort protein 1; SRP1-alpha; KPNA2; RCH1; SRP1; anti-OMP antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed ubiquitously.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-OMP antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived human OMP recombinant protein (Position: E43-L163).
Subcellular Localization	Cytoplasm, Nucleus
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1. Binds specifically and ly to substrates containing either a simple or bipartite NLS motif. Docking of the importin/substrate complex to the nuclear pore complex (NPC) is mediated by KPNB1 through binding to nucleoporin FxFG repeats and the complex is subsequently translocated through the pore by an energy requiring, Ran- dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to importin-beta and the three components separate and importin-alpha and -beta are re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran from importin. The ionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.

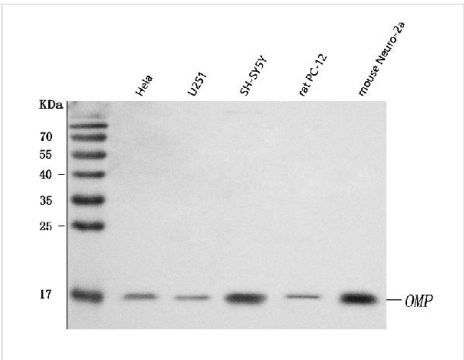


FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of 293T cells using anti-OMP antibody (AAA127081).Overlay histogram showing 293T cells stained with AAA127081 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-OMP Antibody (AAA127081, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

IF (Immunofluorescence)

Figure 2. IF analysis of OMP using anti-OMP antibody (AAA127081).OMP was detected in an immunocytochemical section of CACO2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-OMP Antibody (AAA127081) overnight at 4 degree C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of OMP using anti-OMP antibody (AAA127081).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human HeLa whole cell lysates,Lane 2: human U251 whole cell lysates,Lane 3: human SH-SY5Y whole cell lysates,Lane 4: rat PC-12 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-OMP antigen affinity purified polyclonal antibody (#AAA127081) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for OMP at approximately 17 kDa. The expected band size for OMP is at 19 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-OMP antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-OMP antibody	Primary Antibodies; Immunoglobulins; Immunology; Nuclear Import/Export; Protein Trafficking; Signal Transduction

References	1. Buiakova, O. I., Baker, H., Scott, J. W., Farbman, A., Kream, R., Grillo, M., Franzen, L., Richman, M., Davis, L. M., Abbondanzo, S., Stewart, C. L., Margolis, F. L. Olfactory marker protein(OMP) gene deletion cause altered physiological activity of olfactory sensory neurons. Proc. Nat. Acad. Sci. 93: 9858-9863, 1996.2. Evans, K. L., Fantes, J., Simpson, C., Arveiler, B., Muir, W., Fletcher, J., van Heyningen, V., Steel, K. P., Brown, K. A., Brown, S. D. M., St. Clair, D., Porteous, D. J. Human olfactory markerprotein maps close to tyrosinase and is a candidate gene for Usher syndrome type I. Hum. Molec. Genet. 2: 115-118, 1993.3. Rogers, K. E., Dasgupta, P., Gubler, U., Grillo, M., Khew-Goodall, Y. S., Margolis, F. L.Molecular cloning and sequencing of a cDNA for olfactory marker protein. Proc. Nat. Acad. Sci. 84: 1704-1708, 1987.
------------	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	5453828
NCBI GeneID	4975
NCBI Accession #	NP_006180.1
NCBI GenBank Nucleotide #	NM_006189.1
UniProt Accession #	P47874; Q562G2
NCBI Official Full Name	olfactory marker protein
NCBI Official Synonym Full Names	olfactory marker protein
NCBI Official Symbol	OMP
NCBI Protein Information	olfactory marker protein; olfactory neuronal-specific protein
UniProt Protein Name	Olfactory marker protein
UniProt Gene Name	OMP
UniProt Entry Name	OMP_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.