

## **Anti-Flotillin 2 Picoband Antibody**

**Catalog # ABO12309** 

## **Specification**

## **Anti-Flotillin 2 Picoband Antibody - Product Information**

Application WB, IHC-P, IHC-F

Primary Accession

Host

Q14254

Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Flotillin-2(FLOT2) detection. Tested with WB, IHC-P, IHC-F in Human; Mouse; Rat.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# **Anti-Flotillin 2 Picoband Antibody - Additional Information**

## **Gene ID 2319**

#### **Other Names**

Flotillin-2, Epidermal surface antigen, ESA, Membrane component chromosome 17 surface marker 1, FLOT2, ESA1, M17S1

### **Calculated MW**

47064 MW KDa

### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, By Heat<br/>br>Immunohistochemistry(Frozen Section), 0.5-1  $\mu$ g/ml<br/>br> <br/> Western blot, 0.1-0.5  $\mu$ g/ml<br/> >

## **Subcellular Localization**

Cell membrane ; Peripheral membrane protein . Membrane, caveola ; Peripheral membrane protein . Endosome . Membrane-associated protein of caveolae.

# **Tissue Specificity**

In skin, expressed in epidermis and epidermal appendages but not in dermis. Expressed in all layers of the epidermis except the basal layer. In hair follicles, expressed in the suprabasal layer but not the basal layer. Also expressed in melanoma and carcinoma cell lines, fibroblasts and foreskin melanocytes.

#### **Protein Name**

Flotillin-2

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.



### **Immunogen**

E.coli-derived human Flotillin 2 recombinant protein (Position: K169-K344). Human Flotillin 2 shares 100% amino acid (aa) sequence identity with both mouse and rat Flotillin 2.

#### **Purification**

Immunogen affinity purified.

### **Cross Reactivity**

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

# **Anti-Flotillin 2 Picoband Antibody - Protein Information**

Name FLOT2

Synonyms ESA1, M17S1

### **Function**

May act as a scaffolding protein within caveolar membranes, functionally participating in formation of caveolae or caveolae-like vesicles. May be involved in epidermal cell adhesion and epidermal structure and function.

### **Cellular Location**

Cell membrane; Peripheral membrane protein. Membrane, caveola; Peripheral membrane protein. Endosome Membrane; Lipid-anchor. Note=Membrane- associated protein of caveolae

#### **Tissue Location**

In skin, expressed in epidermis and epidermal appendages but not in dermis. Expressed in all layers of the epidermis except the basal layer. In hair follicles, expressed in the suprabasal layer but not the basal layer. Also expressed in melanoma and carcinoma cell lines, fibroblasts and foreskin melanocytes

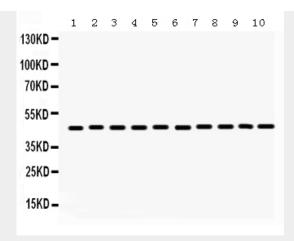
# **Anti-Flotillin 2 Picoband Antibody - Protocols**

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

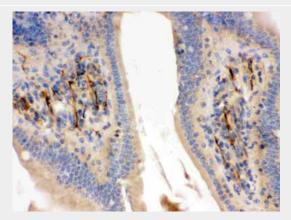
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### Anti-Flotillin 2 Picoband Antibody - Images

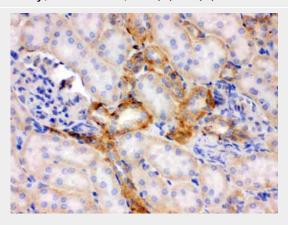




Anti- Flotillin 2 Picoband antibody, ABO12309, Western blottingAll lanes: Anti Flotillin 2 (ABO12309) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Rat Lung Tissue Lysate at 50ugLane 3: Mouse Liver Tissue Lysate at 50ugLane 4: Mouse Lung Tissue Lysate at 50ugLane 5: Mouse Testis Tissue Lysate at 50ugLane 6: Human Placenta Tissue Lysate at 50ugLane 7: A375 Whole Cell Lysate at 40ugLane 8: HELA Whole Cell Lysate at 40ugLane 9: 22RV1 Whole Cell Lysate at 40ugLane 10: NIH3T3 Whole Cell Lysate at 40ugPredicted bind size: 47KDObserved bind size: 47KD

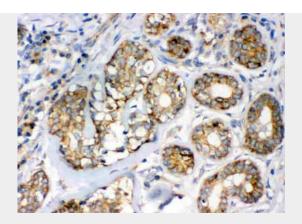


Anti- Flotillin 2 Picoband antibody, ABO12309, IHC(P)IHC(P): Mouse Intestine Tissue



Anti- Flotillin 2 Picoband antibody, ABO12309, IHC(P)IHC(P): Rat Kidney Tissue





Anti- Flotillin 2 Picoband antibody, ABO12309, IHC(P)IHC(P): Human Mammary Cancer Tissue

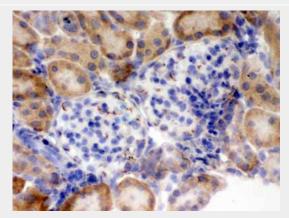


Figure 5. IHC analysis of Flotillin 2 using anti-Flotillin 2 antibody (ABO12309).Flotillin 2 was detected in frozen section of mouse kidney tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with  $1^{\hat{1}}$ /4g/ml rabbit anti-Flotillin 2 Antibody (ABO12309) overnight at  $4\hat{A}^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at  $37\hat{A}^{\circ}$ C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

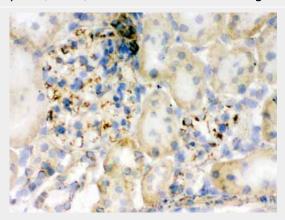


Figure 6. IHC analysis of Flotillin 2 using anti-Flotillin 2 antibody (ABO12309).Flotillin 2 was detected in frozen section of rat kidney tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with  $11\frac{1}{4}$ g/ml rabbit anti-Flotillin 2 Antibody (ABO12309) overnight at  $4\text{Å}^{\circ}\text{C}$ . Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at  $37\text{Å}^{\circ}\text{C}$ . The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



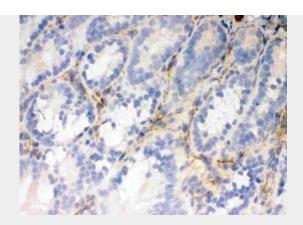


Figure 7. IHC analysis of Flotillin 2 using anti-Flotillin 2 antibody (ABO12309).Flotillin 2 was detected in frozen section of rat small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with  $1^{\hat{1}}$ /4g/ml rabbit anti-Flotillin 2 Antibody (ABO12309) overnight at  $4\hat{A}^{\circ}$ C. Biotinylated goat anti-rabbit lgG was used as secondary antibody and incubated for 30 minutes at  $37\hat{A}^{\circ}$ C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

# **Anti-Flotillin 2 Picoband Antibody - Background**

FLOT2 (Flotillin 2), also known as ESA1 or M17S1, is a protein that in humans is encoded by the FLOT2 gene. Schroeder et al. (1991) isolated a cDNA for an epidermal surface antigen believed to be involved in epidermal cell adhesion. By analysis of a somatic cell hybrid panel and in situ hybridization using the ESA cDNA, the gene was mapped to 17q11-q12 in the region containing the NF1 gene. Bickel et al. (1997) found that mouse Flot2 consistently copurifies with Flot1 and with caveolin-1 in the purification of caveolin-rich membranes. Using a quantitative proteomic analysis of cultured mouse neuronal stem cells, Li et al. (2012) found that palmitoylation and oligomerization of flotillin-2 was abolished in homozygous Dhhc5 mutant neuronal stem cells. The absolute amount of flotillin-2 was not changed in Dhhc5 mutant neurons.