

## CD227

Purified Mouse Monoclonal Antibody Catalog # AO2736a

## Specification

# **CD227 - Product Information**

Application E, WB, IHC **Primary Accession** P15941 Reactivity Human Host Mouse Clonality **Monoclonal** Isotype Mouse IgG1 Calculated MW 122.1kDa KDa Immunogen Purified recombinant fragment of human CD227 (AA: extra 66-175) expressed in E. Coli.

**Formulation** Purified antibody in PBS with 0.05% sodium azide

## **CD227 - Additional Information**

Gene ID 4582

Other Names MUC1; EMA; MCD; PEM; PUM; KL-6; MAM6; MCKD; PEMT; H23AG; MCKD1; MUC-1; ADMCKD; ADMCKD1; CA 15-3; MUC-1/X; MUC1/ZD; MUC-1/SEC

Dilution E~~ 1/10000 WB~~ 1/500 - 1/2000 IHC~~ 1/200 - 1/1000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CD227 is for research use only and not for use in diagnostic or therapeutic procedures.

# **CD227 - Protein Information**

Name MUC1

Synonyms PUM

Function

The alpha subunit has cell adhesive properties. Can act both as an adhesion and an anti-adhesion



protein. May provide a protective layer on epithelial cells against bacterial and enzyme attack.

#### **Cellular Location**

Apical cell membrane; Single-pass type I membrane protein. Note=Exclusively located in the apical domain of the plasma membrane of highly polarized epithelial cells After endocytosis, internalized and recycled to the cell membrane Located to microvilli and to the tips of long filopodial protusions [Isoform Y]: Secreted. [Mucin-1 subunit beta]: Cell membrane. Cytoplasm. Nucleus. Note=On EGF and PDGFRB stimulation, transported to the nucleus through interaction with CTNNB1, a process which is stimulated by phosphorylation. On HRG stimulation, colocalizes with JUP/gamma-catenin at the nucleus

#### **Tissue Location**

Expressed on the apical surface of epithelial cells, especially of airway passages, breast and uterus. Also expressed in activated and unactivated T-cells. Overexpressed in epithelial tumors, such as breast or ovarian cancer and also in non-epithelial tumor cells. Isoform Y is expressed in tumor cells only

#### CD227 - Protocols

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

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

# CD227 - Images

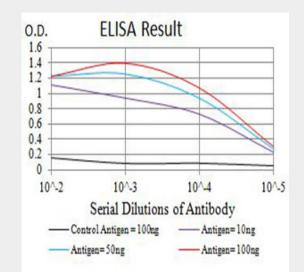


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



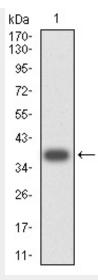


Figure 2:Western blot analysis using CD227 mAb against human CD227 (AA: extra 66-175) recombinant protein. (Expected MW is 38.5 kDa)

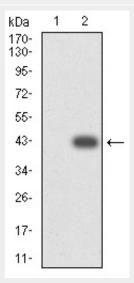


Figure 3:Western blot analysis using CD227 mAb against HEK293 (1) and CD227 (AA: extra 66-175)-hlgGFc transfected HEK293 (2) cell lysate.

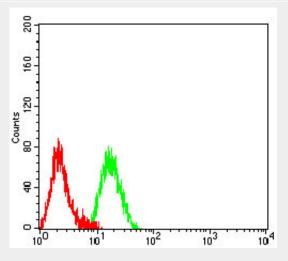


Figure 4:Flow cytometric analysis of Raji cells using CD227 mouse mAb (green) and negative



control (red).

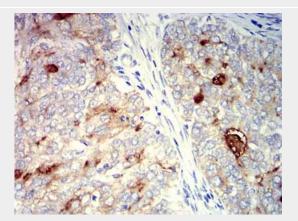
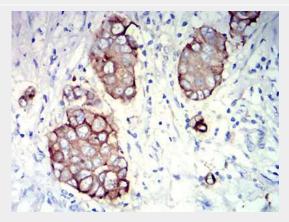


Figure 5:Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using CD227 mouse mAb with DAB staining.



1/200 - 1/1000 CD227 - References

1.Pol J Pathol. 2016;67(4):384-391. 2.Blood. 2015 Jul 16;126(3):354-62.