

P2RY8

Purified Mouse Monoclonal Antibody

Catalog # AO2637a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	Q86VZ1
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1G5A2
Isotype	Mouse IgG2a
Calculated MW	40635
Immunogen	Purified recombinant fragment of human P2RY8 (AA: extra mix) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	286530
Other Names	P2Y8
Dilution	WB~~ 1/500 - 1/2000 IHC~~ 1/200 - 1/1000 ICC~~ 1/100 - 1/500 E~~ 1/10000
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	P2RY8 is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	P2RY8 {ECO:0000303 PubMed:30842656, ECO:0000312 HGNC:HGNC:15524}
Function	G protein-coupled receptor for S-geranylgeranyl-glutathione (GGG), an endogenous metabolite present in lymphoid tissues. Couples the binding of GGG to the activation of GNA13 and downstream repression of AKT activation in lymphocytes defining their positioning and growth within lymphoid organs (PubMed: 25274307 , PubMed: 30842656 , PubMed: 34088745). In lymphoid follicles, confines B cells and follicular helper T cells in germinal centers (GCs) in response to GGG local gradients established by GGT5 (via GGG catabolism) and ABCC1 (via extracellular transport) with lower concentrations of GGG found in the follicular dendritic cell network region around which germinal

centers are formed (PubMed:[25274307](#), PubMed:[30842656](#), PubMed:[34088745](#)). In the bone marrow, also in response to GGG gradients established by GGT5 and ABCC1, it restricts chemotactic transmigration of B cells, T cells and NK cells from blood vessels to the bone marrow parenchyma (PubMed:[30842656](#), PubMed:[34088745](#)). Contributes to GNA13-dependent pathway that suppresses GC B cell growth (PubMed:[25274307](#)).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Barely detectable in normal blood leukocytes. Weaker expression was seen in heart, kidney and lung. Not detected in brain (PubMed:11004484, PubMed:15466006). Expressed in B cells and follicular helper T cells in germinal centers (at protein level) (PubMed:30842656).

References

1.J Exp Med. 2015 Dec 14;212(13):2213-22. 2.Blood. 2010 Jul 1;115(26):5393-7.

Images

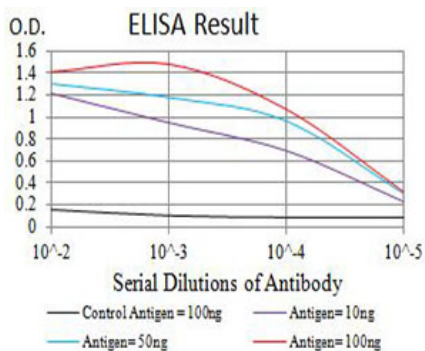


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

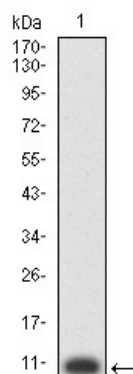


Figure 2:Western blot analysis using P2RY8 mAb against human P2RY8 (AA: extra mix) recombinant protein. (Expected MW is 6.6 kDa)

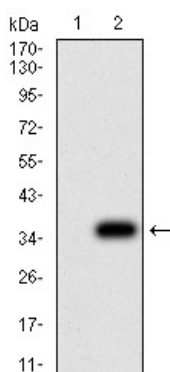


Figure 3:Western blot analysis using P2RY8 mAb against HEK293 (1) and P2RY8 (AA: extra mix)-hIgGfc transfected HEK293 (2) cell lysate.

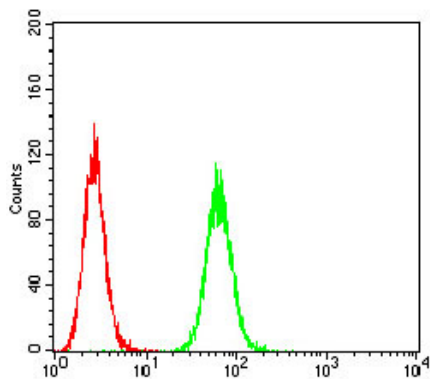


Figure 5:Flow cytometric analysis of HeLa cells using P2RY8 mouse mAb (green) and negative control (red).

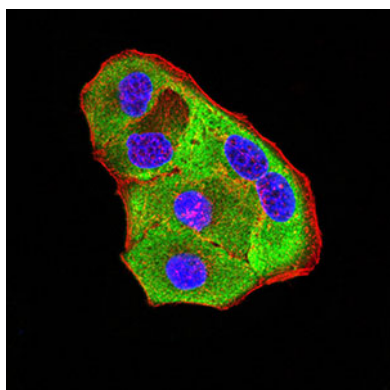


Figure 4:Immunofluorescence analysis of HeLa cells using P2RY8 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

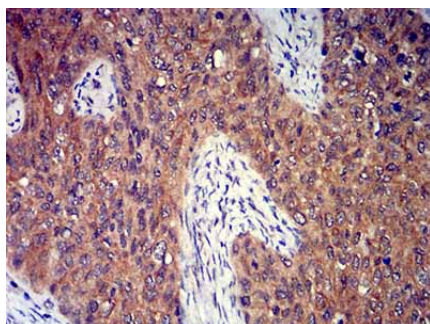


Figure 6:Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using P2RY8 mouse mAb with DAB staining.

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