

Rabbit anti-Mouse, Rat P2Y14/P2ry14 Polyclonal Antibody | anti-P2ry14 antibody

Anti-P2Y14/P2ry14 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125808	Rabbit	Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

P2Y14/P2ry14; Polyclonal Antibody; Anti-P2Y14/P2ry14 Antibody; P2Y purinoceptor 14; P2Y14; G-protein coupled receptor 105; UDP-glucose receptor; P2ry14; Gpr105; purinergic receptor P2Y; G-protein coupled; 14; anti-P2ry14 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for P2Y14/P2ry14 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-P2ry14 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E Coli-derived mouse P2Y14/P2ry14 recombinant protein (Position: N17-L338).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of Neuro-2a cells using anti-P2Y14/P2ry14 antibody (AAA125808). Overlay histogram showing Neuro-2a cells stained with AAA125808 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-P2Y14/P2ry14 Antibody (AAA125808, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight[®]488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of mouse spleen tissue using anti-P2Y14/P2ry14 antibody (AAA125808). Overlay histogram showing mouse spleen tissue stained with AAA125808 (Blue line). The tissue section was blocked with 10% normal goat serum. And then incubated with rabbit anti-P2Y14/P2ry14 Antibody (AAA125808, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight[®]488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of P2Y14/P2ry14 using anti-P2Y14/P2ry14 antibody (AAA125808). 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 30ug of sample under reducing conditions. Lane 1: rat NRK whole cell lysates Lane 2: rat PC-12 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-P2Y14/P2ry14 antigen affinity purified polyclonal antibody (Catalog # AAA125808) at 0.5 µg/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 P2Y14/P2ry14 at approximately 40KD. The expected band size for P2Y14/P2ry14 is at 40KD.

ADDITIONAL INFORMATION

Related Product Information for anti-P2ry14 antibody	The product of this gene belongs to the family of G-protein coupled receptors, which contains several receptor subtypes with different pharmacological selectivity for various adenosine and uridine nucleotides. This receptor is a P2Y purinergic receptor for UDP-glucose and other UDP-sugars coupled to G-proteins. It has been implicated in extending the known immune system functions of P2Y receptors by participating in the regulation of the stem cell compartment, and it may also play a role in neuroimmune function. Two transcript variants encoding the same protein have been identified for this gene.
References	1. Chambers, J. K., Macdonald, L. E., Sarau, H. M., Ames, R. S., Freeman, K., Foley, J. J., Zhu, Y., McLaughlin, M. M., Murdock, P., McMillan, L., Trill, J., Swift, A., and 14 others. A G protein-coupled receptor for UDP-glucose. J. Biol. Chem. 275: 10767-10771, 2000. 2. Charlton, M. E., Williams, A. S., Fogliano, M., Sweetnam, P. M., Duman, R. S. The isolation and characterization of a novel G protein-coupled receptor regulated by immunologic challenge. Brain Res. 764: 141-148, 1997. 3. Lee, B. -C., Cheng, T., Adams, G. B., Attar, E. C., Miura, N., Lee, S. B., Saito, Y., Olszak, I., Dombkowski, D., Olson, D. P., Hancock, J., Choi, P. S., Haber, D. A., Luster, A. D., Scadden, D. T. P2Y-like receptor, GPR105 (P2Y14), identifies and mediates chemotaxis of bone-marrow hematopoietic stem cells. Genes Dev. 17: 1592-1604, 2003.

NCBI AND UNIPROT INFORMATION

NCBI GI #	56676312
NCBI GeneID	140795
NCBI Accession #	NP_001008497.1
NCBI GenBank Nucleotide #	NM_001008497.2
UniProt Accession #	Q9ESG6
Molecular Weight	38,861 Da
NCBI Official Full Name	P2Y purinoceptor 14 isoform a
NCBI Official Synonym Full Names	purinergic receptor P2Y, G-protein coupled, 14
NCBI Official Symbol	P2ry14
NCBI Official Synonym Symbols	P2Y14; Gpr105; A330108O13Rik
NCBI Protein Information	P2Y purinoceptor 14; UDP-glucose receptor; G-protein coupled receptor 105
UniProt Protein Name	P2Y purinoceptor 14
UniProt Gene Name	P2ry14
UniProt Synonym Gene Names	Gpr105; P2Y14

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/p2y14-p2ry14-antibody-direct-elisa-flow-cytometry-western-blot-elisa/125808>