For Research Use Only

Glypican 2 Recombinant antibody, PBS Only (Capture)

Catalog Number:83241-1-PBS



Purification Method:

Protein A purification

 $K_{Off} < 1.00 \times 10^{-6} M$

 $K_{On} = 1.07 \times 10^5 M$

CloneNo.:

230518A4

Affinity: $K_D < 1.00 \times 10^{-12} M$

Basic Information

Catalog Number: GenBank Accession Number:

83241-1-PBS

GeneID (NCBI): Size: 100ug, Concentration: 1 mg/ml by 221914

Nanodrop; **UNIPROT ID:**

Source Q8N158 Rabbit Full Name: glypican 2 Isotype IgG Calculated MW: Immunogen Catalog Number: 579 aa, 63 kDa

AG4041 Observed MW:

62 70-100 kDa

Applications

Tested Applications:

Cytometric bead array, Indirect ELISA

Species Specificity:

human

Product Information

83241-1-PBS targets Glypican 2 as part of a matched antibody pair:

MP00156-2: 83241-1-PBS capture and 83241-2-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a $concentration of 1\,mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant$ technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

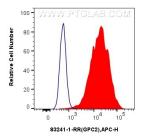
Background Information

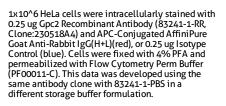
GPC2 (glypican 2), which is expected to be located in cell membrane and extracellular space. It is expressed in lymphoid tissue, skin and testis. The calculated molecular weight of the protein is 62 kDa. GPC2 is mainly active in growing nervous tissues and thyroid cancer tissues (PMID: 28616017). It participates in the growth and differentiation of neuronal axons. Increasing evidence has demonstrated the overexpression of GPC2 in neuroblastoma, a kind of childhood cancer. There is a discovery that GPC2 can be employed as a diagnostic, prognostic, and immunological predictor of generalized cancers. The study may broaden the train of thought toward application of GPC2 in immunotherapy (PMID: 35345673).

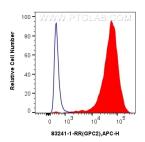
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

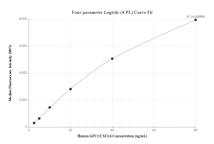
Selected Validation Data



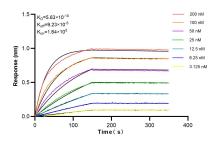




1x10^6 SH-SY5Y cells were intracellularly stained with 0.25 ug Gpc2 Recombinant Antibody (83241-1-RR, Clone:230518A4) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83241-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00156-2, Glypican 2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83241-1-PBS. Detection antibody: 83241-2-PBS. Standard: Ag4041. Range: 2.5-80 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 83241-1-RR against Human Glypican 2 were performed. The affinity constant is below 1 pM.