For Research Use Only

USP4 Recombinant antibody, PBS Only (Capture)

Catalog Number:83734-2-PBS



Purification Method:

Protein A purification

CloneNo.:

240797B11

Basic Information

Catalog Number: GenBank Accession Number:

83734-2-PBS BC125131

Size: GeneID (NCBI): 100ug, Concentration: 1 mg/ml by 7375

Nanodrop; UNIPROT ID: Source: Q13107 Rabbit Full Name:

lsotype: ubiquitin specific peptidase 4 (proto-

IgG oncogene)

Immunogen Catalog Number: Calculated MW: AG28297 963 aa. 109 kDa

Observed MW: 109 kDa

Applications

Tested Applications:

WB, IHC, FC (Intra), Cytometric bead array, Indirect

ELISA

Species Specificity:

human

Product Information

83734-2-PBS targets USP4 as part of a matched antibody pair:

MP00717-1: 83734-2-PBS capture and 83734-4-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.

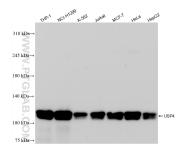
Background Information

USP4, also known as UNP and UNPH, belongs to the peptidase C19 family and USP4 subfamily. USP4 is a deubiquitinating enzyme that links to mitogen-activated protein kinase signaling, pre-mRNA splicing, and control of p53 stability (PMID: 26455393). USP4 has 3 isoforms with the molecular mass of 36, 104 and 109 kDa. Recently, it has been reported that USP4 is a critical factor in promoting lung cancer stemness and potentially useful lung cancer prognosis marker (PMID: 32549341).

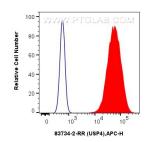
Storage

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

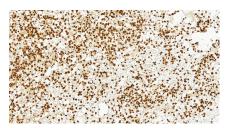
Selected Validation Data



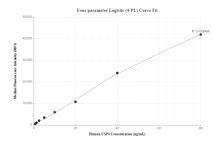
Various lysates were subjected to SDS PAGE followed by western blot with 83734-2-RR (USP4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83734-2-PBS in a different storage buffer formulation.



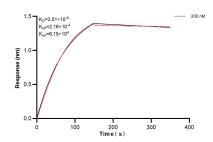
1x10^6 U-251 cells were intracellularly stained with 0.25 ug USP4 Recombinant antibody (83734-2-RR, Clone:240797B11) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83734-2-PBS in a different storage buffer formulation.



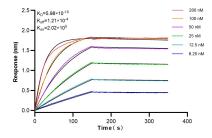
Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83734-2-RR (USP4 antibody) at dilution of 1:600 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83734-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00717-1, USP4 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83734-2-PBS. Detection antibody: 83734-4-PBS. Standard: Ag28297. Range: 0.625-80 ng/mL



Biolayer interferometry (BLI) kinetic assay of 83734-2-PBS against Human USP4 was performed. The affinity constant is 3.51 nM.



Biolayer interferometry (BLI) kinetic assays of 83734-2-RR against Human USP4 were performed. The affinity constant is 0.598 nM.