## For Research Use Only

## USP4 Recombinant antibody

Catalog Number:83734-2-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

83734-2-RR BC125131 Protein A purification

GeneID (NCBI): Size: CloneNo.: 100ul, Concentration: 1000 ug/ml by 7375 240797B11

Nanodrop: **UNIPROT ID:** Recommended Dilutions: Q13107 WB 1:5000-1:50000 Rabbit IHC 1:300-1:1200 Full Name:

Isotype: ubiquitin specific peptidase 4 (proto-

IgG oncogene) Immunogen Catalog Number: Calculated MW: 963 aa, 109 kDa AG28297

> Observed MW: 109 kDa

**Applications** 

**Tested Applications:** WB, IHC, FC (Intra), ELISA

Species Specificity:

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: THP-1 cells, NCI-H1299 cells, K-562 cells, Jurkat cells, MCF-7 cells, HeLa cells, HepG2 cells

**Purification Method:** 

IHC: human ovary cancer tissue,

## **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 -20°C. Stable for one year after shipment.

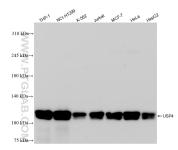
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

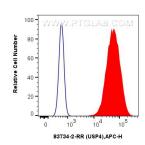
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

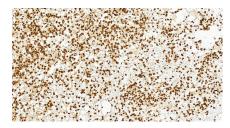
## **Selected Validation Data**



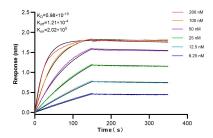
Various lysates were subjected to SDS PAGE followed by western blot with 83734-2-RR (USP4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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).



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).



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