## For Research Use Only

## Cytokeratin 13 Recombinant antibody, PBS Only (Capture)

Catalog Number:83058-1-PBS Featured Product



**Purification Method:** 

Protein A purification

CloneNo.:

230366B10

**Basic Information** 

Catalog Number: GenBank Accession Number:

83058-1-PBS BC002661

Size: GenelD (NCBI):

100ug , Concentration: 1mg/ml by 3860

Nanodrop; UNIPROT ID:
Source: P13646
Rabbit Full Name:
Isotype: keratin 13
IgG Calculated MW:

Immunogen Catalog Number: 50 kDa

AG0217 Observed MW:

50 kDa

Applications

**Tested Applications:** 

WB, IHC, IF/ICC, Cytometric bead array, Sandwich

ELISA, Indirect ELISA, Sample test

Species Specificity:

human, mouse, rat

**Product Information** 

83058-1-PBS targets Cytokeratin 13 as part of a matched antibody pair:

MP00074-1: 83058-1-PBS capture and 83058-3-PBS detection (validated in Cytometric bead array)

MP00074-2: 83058-1-PBS capture and 83058-5-PBS detection (validated in Sandwich ELISA)

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.

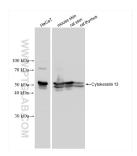
**Background Information** 

Keratin 13 is a member of the keratin family. The keratins are intermediate filament proteins responsible for the structural integrity of epithelial cells and are subdivided into cytokeratins and hair keratins. Most of the type I cytokeratins consist of acidic proteins which are arranged in pairs of heterotypic keratin chains. This type I cytokeratin is paired with keratin 4 and expressed in the suprabasal layers of non-cornified stratified epithelia. Mutations in keratin 13 gene and keratin 4 have been associated with the autosomal dominant disorder White Sponge Nevus. The type I cytokeratins are clustered in a region of chromosome 17q21.2.

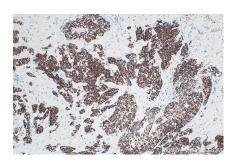
Storage

Storage: Store at -80°C. Storage Buffer: 100% PBS pH 7.3

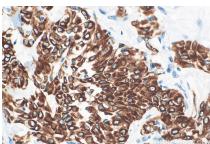
## Selected Validation Data



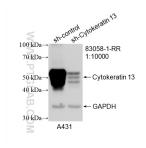
Various lysates were subjected to SDS PAGE followed by western blot with 83058-1-RR (KRT13 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83058-1-PBS in a different storage buffer formulation.



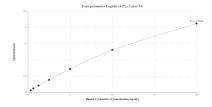
Immunohistochemical analysis of paraffinembedded human urothelial carcinoma tissue slide using 83058-1-RR (Cytokeratin 13 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83058-1-PBS in a different storage buffer formulation.



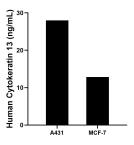
Immunohistochemical analysis of paraffinembedded human urothelial carcinoma tissue slide using 83058-1-RR (Cytokeratin 13 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83058-1-PBS in a different storage buffer formulation.



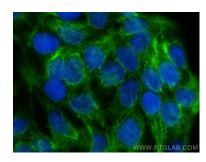
WB result of Cytokeratin 13 antibody (83058-1-RR; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Cytokeratin 13 transfected A431 cells. This data was developed using the same antibody clone with 83058-1-PBS in a different storage buffer formulation.



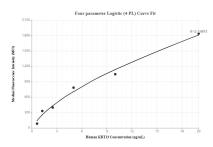
Sandwich ELISA standard curve of MP00074-2, Human Cytokeratin 13 Recombinant Matched Antibody Pair - PBS only. 83058-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag0217. 83058-5-PBS was HRP conjugated as the detection antibody. Range: 0.313-20 ng/mL



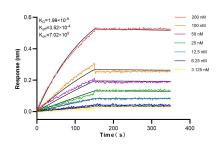
The mean Cytokeratin 13 concentration was determined to be 28.00 ng/mL in A431 cell extract based on a 1.50 mg/mL extract load and 12.84 ng/mL in MCF-7 cell extract based on a 1.20 mg/mL extract load.



Immunofluorescent analysis of (-20°C Methanol) fixed HaCaT cells using Cytokeratin 13 antibody (83058-1-RR, Clone: 230366B10) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83058-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00074-1, Cytokeratin 13 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83058-1-PBS. Detection antibody: 83058-3-PBS. Standard: Ag0217. Range: 0.625-20 ng/mL



Biolayer interferometry (BLI) kinetic assays of 83058-1-RR against Human Cytokeratin 13 were performed. The affinity constant is 1.99 nM.