For Research Use Only

## Cytokeratin 8 Recombinant monoclonal antibody, PBS Only (Capture)

www.ptglab.com

Catalog Number:86457-4-PBS

**Basic Information** 

Catalog Number:

GenBank Accession Number:

**Purification Method:** Protein A purification

86457-4-PBS

GeneID (NCBI):

Size:

CloneNo.:

251045E11

100ug, Concentration: 1 mg/ml by Nanodrop:

**UNIPROT ID:** 

BC000654

P05787

Source: Rabbit

Full Name:

Isotype IgG

keratin 8

Calculated MW: 54 kDa

Observed MW:

52 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, IF-P, Sandwich ELISA, Indirect ELISA

Species Specificity:

human

**Product Information** 

86457-4-PBS targets Cytokeratin 8 as part of a matched antibody pair:

MP02886-1: 86457-4-PBS capture and 86457-8-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.

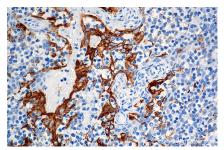
## **Background Information**

Cytokeratin 8 (CK8) is a protein that belongs to the cytokeratin family, which is a group of structural proteins found in the intracytoplasmic cytoskeleton of epithelial cells. CK8 forms intermediate filaments within the cytoplasm of simple epithelial cells, typically as a dimer with cytokeratin 18 (CK18). These filaments provide a stabilizing framework that helps determine cell shape and enables cells to cope with mechanical stress. CK8/CK18 filaments also serve as a mesh of "paths" for signaling molecules, metabolites, and pathogens to travel within the cell in an organized manner. CK8 is expressed in various epithelial tissues and is particularly associated with glandular and simple epithelia. Its expression is also a significant marker in several types of cancer, including lung and esophageal cancer, where it can indicate tumor progression and poor prognosis.

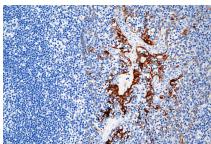
Storage

Storage: Store at -80°C. Storage Buffer: PBS only, pH7.3

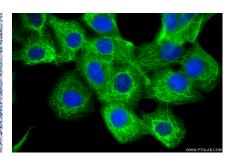
## **Selected Validation Data**



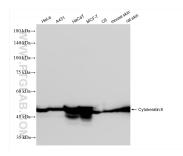
Immunohistochemical analysis of paraffinembedded human tonsil tissue slide using 86457-4-RR (Cytokeratin 8 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86457-4-PBS in a different storage buffer formulation.



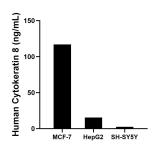
Immunohistochemical analysis of paraffinembedded human tonsil tissue slide using 86457-4-RR (Cytokeratin 8 antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86457-4-PBS in a different storage buffer formulation.



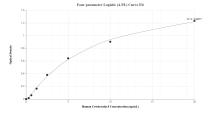
Immunofluorescent analysis of (-20°C Methanol) fixed A431 cells using Cytokeratin 8 antibody (86457-4-RR, Clone: 251045E11) at dilution of 1:2000 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 86457-4-PBS in a different storage buffer formulation.



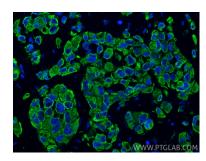
Various lysates were subjected to SDS PAGE followed by western blot with 86457-4-RR (Cytokeratin 8 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86457-4-PBS in a different storage buffer formulation.



The mean Cytokeratin 8 concentration was determined to be 116.99 ng/mL in MCF-7 cell extract based on a 1.20 mg/mL extract load, 15.41 ng/mL in HepG2 cell extract based on a 1.20 mg/mL extract load and 2.54 ng/mL in SH-SY5Y cell extract based on a 1.20 mg/mL extract load.



Sandwich ELISA standard curve of MP02886-1, Human Cytokeratin 8 Recombinant Matched Antibody Pair - PBS only. 86457-4-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard SY02545. 86457-8-PBS was HRP conjugated as the detection antibody. Range: 0.313-20 ng/mL



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human breast cancer tissue using Cytokeratin 8 antibody (86457-4-RR, Clone: 251045E11) at dilution of 1:400 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86457-4-PBS in a different storage buffer formulation.