

## Basic Information

Product Name	Anti-TRPV5 Antibody
Gene Name	TRPV5
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human TRPV5 different from the related mouse and rat sequences by one amino acid.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	83 kDa
Dilution Ratios	Western blot (WB):1:500-2000

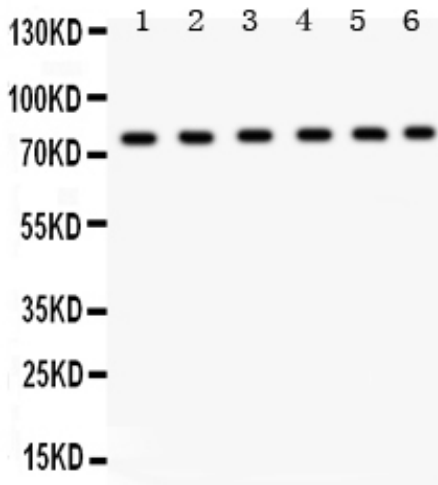
## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

Transient receptor potential cation channel subfamily V member 5 is a protein that in humans is encoded by the TRPV5 gene. This gene is a member of the transient receptor family and the TrpV subfamily. The calcium-selective channel encoded by this gene has 6 transmembrane-spanning domains, multiple potential phosphorylation sites, an N-linked glycosylation site, and 5 ANK repeats. And this protein forms homotetramers or heterotetramers and is activated by a low internal calcium level. In addition, TRPV5 is mainly expressed in kidney epithelial cells, where it plays an important role in the reabsorption of Ca<sup>2+</sup>. Genetic deletion of TRPV5 in mice leads to Ca<sup>2+</sup> loss in the urine, and consequential hyperparathyroidism, and bone loss.

## Selected Validation Data



Western blot analysis of TRPV5 using anti-TRPV5 antibody (PB0549). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat Pancreas tissue lysates,

Lane 2: Rat Lung tissue lysates,

Lane 3: Rat Intestine tissue lysates,

Lane 4: SW620 whole cell lysates,

Lane 5: COLO320 whole cell lysates,

Lane 6: 293T whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-TRPV5 antigen affinity purified polyclonal antibody (PB0549) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TRPV5 at approximately 83 kDa. The expected band size for TRPV5 is at 83 kDa.