

---

**Product Name: TRPV4 Rabbit Polyclonal Antibody****Catalog #: APRab19330**

For research use only.

**Summary**

|                      |   |
|----------------------|---|
| <b>Description</b>   | Rabbit polyclonal Antibody  |
| <b>Host</b>          | Rabbit  |
| <b>Application</b>   | WB,ELISA  |
| <b>Reactivity</b>    | Human,Mouse,Rat   |
| <b>Conjugation</b>   | Unconjugated  |
| <b>Modification</b>  | Unmodified  |
| <b>Isotype</b>       | IgG   |
| <b>Clonality</b>     | Polyclonal  |
| <b>Form</b>          | Liquid  |
| <b>Concentration</b> | 1mg/ml  |
| <b>Storage</b>       | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.                       |
| <b>Shipping</b>      | Ice bags  |
| <b>Buffer</b>        | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| <b>Purification</b>  | Affinity purification   |

**Application**

|                         |                                       |
|-------------------------|---------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:500-1:2000,ELISA 1:10000-1:20000 |
| <b>Molecular Weight</b> | 98kDa                                 |

**Antigen Information**

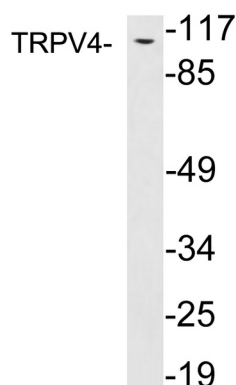
|                          |   |
|--------------------------|---|
| <b>Gene Name</b>         | TRPV4   |
| <b>Alternative Names</b> | TRPV4; VRL2; VROAC; Transient receptor potential cation channel subfamily V member 4; TrpV4; Osm-9-like TRP channel 4; OTRPC4; Transient receptor potential protein 12; TRP12;Vanilloid receptor-like channel 2; Vanilloid receptor-like protein 2; VRL-2; Vanilloid receptor-related osmotically-activated channel; VR-OAC |
| <b>Gene ID</b>           | 59341.0   |
| <b>SwissProt ID</b>      | Q9HBA0  |
| <b>Immunogen</b>         | The antiserum was produced against synthesized peptide derived from human TRPV4. AA range:417-466   |

## Background

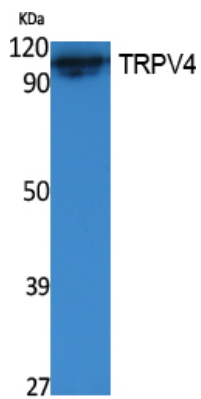
transient receptor potential cation channel subfamily V member 4 (TRPV4) Homo sapiens This gene encodes a member of the OSM9-like transient receptor potential channel (OTRPC) subfamily in the transient receptor potential (TRP) superfamily of ion channels. The encoded protein is a Ca<sup>2+</sup>-permeable, nonselective cation channel that is thought to be involved in the regulation of systemic osmotic pressure. Mutations in this gene are the cause of spondylometaphyseal and metatropic dysplasia and hereditary motor and sensory neuropathy type IIC. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2010],disease:Defects in TRPV4 are the cause of brachyolmia type 3 [MIM:113500]; also called brachyrachia. The brachyolmias constitute a clinically and genetically heterogeneous group of skeletal dysplasias characterized by a short trunk, scoliosis and mild short stature. Type 3 brachyolmia is an autosomal dominant form with severe kyphoscoliosis and flattened, irregular cervical vertebrae.,function:Non-selective calcium permeant cation channel probably involved in osmotic sensitivity and mechanosensitivity. Activation by exposure to hypotonicity within the physiological range exhibits an outward rectification. Also activated by low pH, citrate and phorbol esters. Increase of intracellular Ca(2+) potentiates currents. Channel activity seems to be regulated by a calmodulin-dependent mechanism with a negative feedback mechanism.,similarity:Belongs to the transient receptor family. TrpV subfamily.,similarity:Contains 3 ANK repeats.,subcellular location:Assembly of the putative homotetramer occurs primarily in the endoplasmic reticulum.,subunit:Homotetramer (Probable). Self-associates in a isoform-specific manner. Isoforms 1/A and 5/D but not isoform 2/B, 4/C and 6/E can oligomerize. Interacts with calmodulin. Interacts with Map7 and Src family Tyr protein kinases LYN, SRC, FYN, HCK, LCK and YES.,

## Research Area

### Image Data



Western blot analysis of lysates from PC12 cells, using TRPV4 antibody.



Western Blot analysis of extracts from K562 cells, using TRPV4 Polyclonal Antibody..  
Secondary antibody was diluted at 1:20000