## Rat Transient receptor potential cation channel subfamily M member 7 (TRPM7) ELISA Kit

SAB Signalway Antibody

Catalog No: #EK5998

Package Size: #EK5998-1 48T #EK5998-2 96T

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

## Description

| Product Name       | Rat Transient receptor potential cation channel subfamily M member 7 (TRPM7) ELISA Kit                           |
|--------------------|--|
| Brief Description  | ELISA Kit  |
| Applications       | ELISA  |
| Species Reactivity | Rat (Rattus norvegicus)  |
| Other Names        | CHAK; CHAK1; FLJ20117; FLJ25718; LTRPC7; TRP-PLIK; LTRPC ion channel family member 7                             |
| Accession No.      | Q925B3   |
| Uniprot            | Q925B3   |
| Storage            | The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% |
|                    | within the expiration date under appropriate storage condition.  |
|                    | The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days,      |
|                    | and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China     |
|                    | Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage      |
|                    | at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).         |

## **Application Details**

| Detect Range:0.156-10 ng/mL                        |
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| Sensitivity:0.052 ng/mL                            |
| Sample Type:Serum, Plasma, Other biological fluids |
| Sample Volume: 1-200 μL                            |
| Assay Time:1-4.5h                                  |
| Detection wavelength:450 nm                        |

## **Product Description**

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate TRPM7 in samples. An antibody specific for TRPM7 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyTRPM7 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for TRPM7 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of TRPM7 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:TRPM8 is an ion channel, upon activation it allows the entry of Na+ (sodium) and Ca2+ (calcium) ions to the cell that leads to depolarization and the generation of an action potential. This eventually leads to the feeling of cold. The TRPM8 protein is expressed in sensory neurons, and it is activated by cold temperatures and cooling agents, such as menthol and icilin where as WS-12 and CPS-369 are the most selective agonist of TRPM8.TRPM8 is also expressed in the prostate, lungs, and bladder where its function is not very well understood.TRPM8 upregulation in bladder tissues correlates with pain in patients with painful bladder syndromes.Furthermore, TRPM8 is upregulated in many prostate cancer cell lines and Dendreon/Genentech are pursuing an agonist approach to induce apoptosis and prostate cancer cell death.

Note: This product is for in vitro research use only