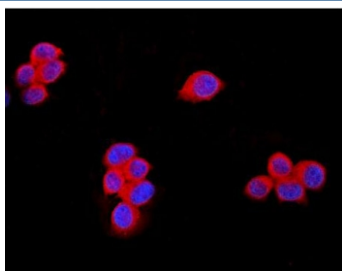


## TRPM7 Antibody (RQ4618)

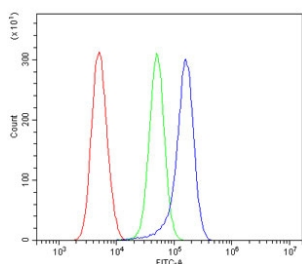
| Catalog No. | Formulation                                           | Size   |
|-------------|-------------------------------------------------------|--------|
| RQ4618      | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

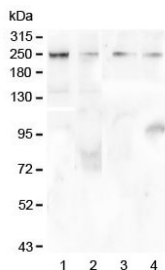
|                           |                                                                                                                                                                      |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Availability</b>       | 1-3 business days                                                                                                                                                    |
| <b>Species Reactivity</b> | Human                                                                                                                                                                |
| <b>Format</b>             | Antigen affinity purified                                                                                                                                            |
| <b>Clonality</b>          | Polyclonal (rabbit origin)                                                                                                                                           |
| <b>Isotype</b>            | Rabbit IgG                                                                                                                                                           |
| <b>Purity</b>             | Antigen affinity purified                                                                                                                                            |
| <b>Buffer</b>             | Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide                                                                                                    |
| <b>UniProt</b>            | Q96QT4                                                                                                                                                               |
| <b>Applications</b>       | Western Blot : 0.5-1ug/ml<br>Immunofluorescence (FFPE) : 2-4ug/ml<br>Flow Cytometry : 1-3ug/million cells<br>Direct ELISA : 0.1-0.5ug/ml (human recombinant protein) |



Immunofluorescent staining of FFPE human MCF7 cells with TRPM7 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human ThP-1 cells with TRPM7 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= TRPM7 antibody.



Western blot testing of human 1) HeLa, 2) COLO-320, 3) 22RV1 and 4) SGC-7901 lysate with TRPM7 antibody at 0.5ug/ml. Predicted molecular weight ~212 kDa.

## Description

Transient receptor potential cation channel, subfamily M, member 7, also known as TRPM7, is a human gene encoding a protein of the same name. It is mapped to 15q21.2. This gene belongs to the melastatin subfamily of transient receptor potential family of ion channels. The protein encoded by this gene is both an ion channel and a serine/threonine protein kinase. The kinase activity is essential for the ion channel function, which serves to increase intracellular calcium levels and to help regulate magnesium ion homeostasis. The encoded protein is involved in cytoskeletal organization, cell adhesion, cell migration and organogenesis. Defects in this gene are a cause of amyotrophic lateral sclerosis-parkinsonism/dementia complex of Guam. The gene may also be associated with defects of cardiac function.

## Application Notes

Optimal dilution of the TRPM7 antibody should be determined by the researcher.

## Immunogen

Amino acids K777-K905 from the human protein were used as the immunogen for the TRPM7 antibody.

## Storage

After reconstitution, the TRPM7 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.