

#### TNFSF11

Purified Mouse Monoclonal Antibody Catalog # AO2634a

# **Specification**

## **TNFSF11 - Product Information**

Application WB, IHC, ICC, E

Primary Accession
Reactivity
Host
Clonality
Host
Monoclonal
Isotype
Mouse IgG1
Calculated MW
Monoclonal
Mouse IgG1
Mose IgG1

**Immunogen** 

Purified recombinant fragment of human TNFSF11 (AA: 74-308) expressed in E. Coli.

## **Formulation**

Purified antibody in PBS with 0.05% sodium azide

#### **TNFSF11 - Additional Information**

**Gene ID 8600** 

# **Other Names**

CD254; ODF; OPGL; sOdf; OPTB2; RANKL; TNLG6B; TRANCE; hRANKL2

## **Dilution**

WB~~ 1/500 - 1/2000 IHC~~ 1/200 - 1/1000 ICC~~N/A

# Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

E~~ 1/10000

TNFSF11 is for research use only and not for use in diagnostic or therapeutic procedures.

#### **TNFSF11 - Protein Information**

Name TNFSF11

Synonyms OPGL, RANKL, TRANCE

## **Function**

Cytokine that binds to TNFRSF11B/OPG and to TNFRSF11A/RANK. Osteoclast differentiation and



activation factor. Augments the ability of dendritic cells to stimulate naive T-cell proliferation. May be an important regulator of interactions between T-cells and dendritic cells and may play a role in the regulation of the T-cell-dependent immune response. May also play an important role in enhanced bone-resorption in humoral hypercalcemia of malignancy (PubMed:<a href="http://www.uniprot.org/citations/22664871" target="\_blank">22664871</a>). Induces osteoclastogenesis by activating multiple signaling pathways in osteoclast precursor cells, chief among which is induction of long lasting oscillations in the intracellular concentration of Ca (2+) resulting in the activation of NFATC1, which translocates to the nucleus and induces osteoclast-specific gene transcription to allow differentiation of osteoclasts. During osteoclast differentiation, in a TMEM64 and ATP2A2-dependent manner induces activation of CREB1 and mitochondrial ROS generation necessary for proper osteoclast generation (By similarity).

#### **Cellular Location**

[Isoform 1]: Cell membrane; Single-pass type II membrane protein [Isoform 2]: Cytoplasm.

## **Tissue Location**

Highest in the peripheral lymph nodes, weak in spleen, peripheral blood Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and thyroid

#### **TNFSF11 - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## TNFSF11 - Images

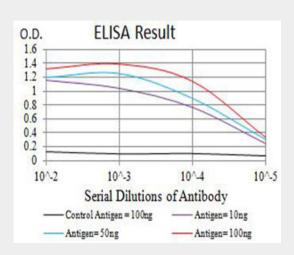


Figure 1:Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



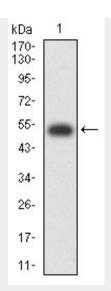


Figure 2:Western blot analysis using TNFSF11 mAb against human TNFSF11 (AA: 74-308) recombinant protein. (Expected MW is 52.6 kDa)

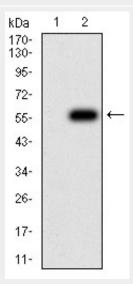


Figure 3:Western blot analysis using TNFSF11 mAb against HEK293 (1) and TNFSF11 (AA: 74-308)-hlgGFc transfected HEK293 (2) cell lysate.

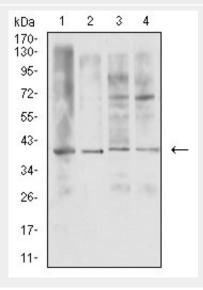




Figure 4:Western blot analysis using TNFSF11 mouse mAb against U937 (1), HL-60 (2), Raji (3), and Ramos (4) cell lysate.

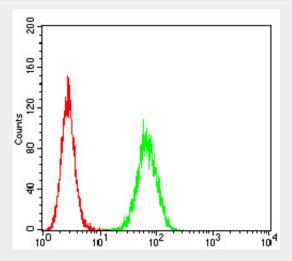


Figure 5:Flow cytometric analysis of Hela cells using TNFSF11 mouse mAb (green) and negative control (red).

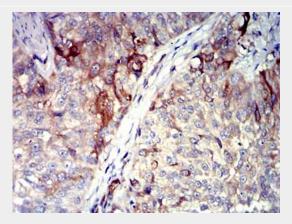


Figure 6:Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using TNFSF11 mouse mAb with DAB staining.

# **TNFSF11 - References**

1.Breast Cancer Res. 2015 Feb 21;17:24.2.Immunobiology. 2015 May;220(5):692-700.