

**TNFSF11**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2633a****Specification**

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**TNFSF11 - Product Information**

Application	<b>E, WB, ICC, IHC</b>
Primary Accession	<a href="#">O14788</a>
Reactivity	<b>Human, Monkey</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>Mouse IgG1</b>
Calculated MW	<b>35.5kDa KDa</b>

**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**

E~~ 1/10000  
WB~~ 1/500 - 1/2000  
ICC~~ 1/100 - 1/500

**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**

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 Cytometry](#)
- [Cell Culture](#)

**TNFSF11 - Images**

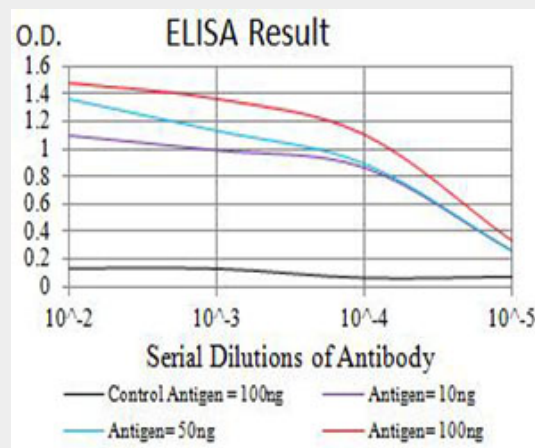


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

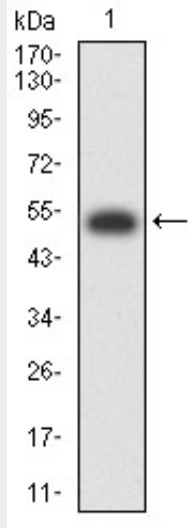


Figure 2:Western blot analysis using TNFSF11 mAb against human TNFSF11 (AA: 74-308) recombinant protein. (Expected MW is 52.6 kDa)

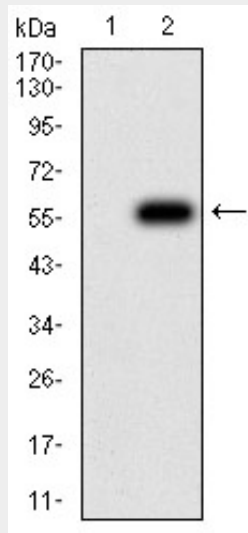


Figure 3:Western blot analysis using TNFSF11 mAb against HEK293 (1) and TNFSF11 (AA: 74-308)-hlgGFc transfected HEK293 (2) cell lysate.

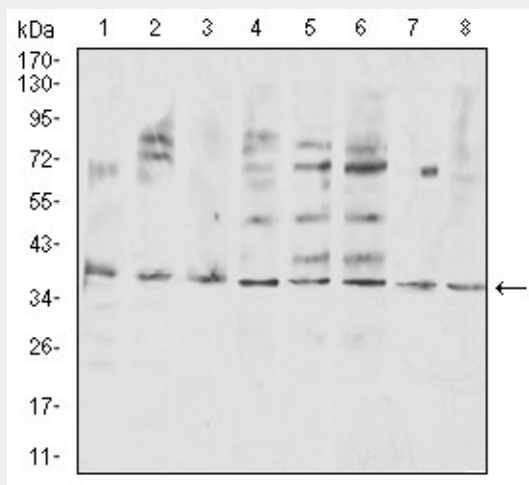


Figure 4:Western blot analysis using TNFSF11 mouse mAb against COS7 (1), HeLa (2), U937 (3),

HL-60 (4), Raji (5), Ramos (6), Jurkat (7), and SW480 (8) cell lysate.

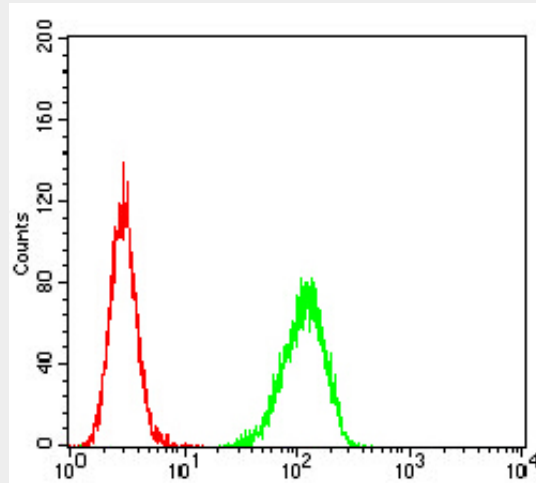


Figure 6:Flow cytometric analysis of Hela cells using TNFSF11 mouse mAb (green) and negative control (red).

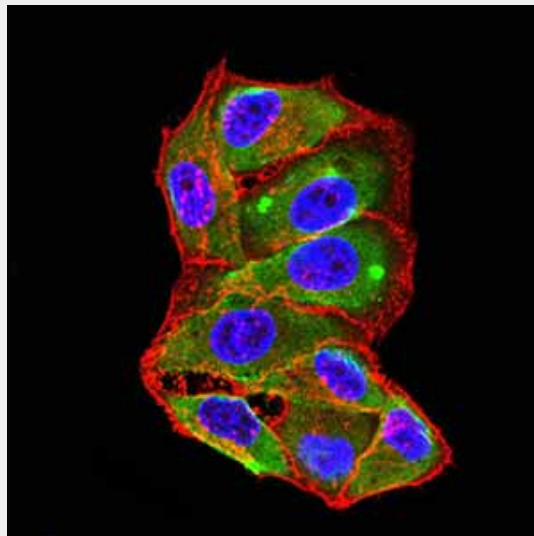


Figure 5:Immunofluorescence analysis of Hela cells using TNFSF11 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

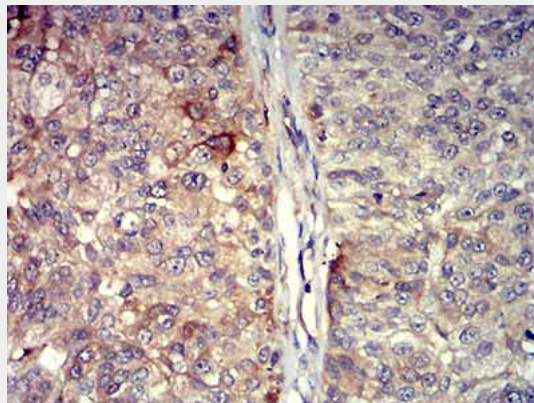


Figure 7:Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using TNFSF11 mouse mAb with DAB staining.

**TNFSF11 - References**

1. Breast Cancer Res. 2015 Feb 21;17:24. 2. Immunobiology. 2015 May;220(5):692-700.