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TNFSF11
Purified Mouse Monoclonal Antibody
Catalog # AO2633a

Specification

TNFSF11 - Product Information

Application	**WB, IHC, ICC, E**
Primary Accession	O14788
Reactivity	**Human, Monkey**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**35.5kDa KDa**

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~~1:100~500
ICC~~ 1/100 - 1/500
E~~ 1/10000

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:22664871). 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

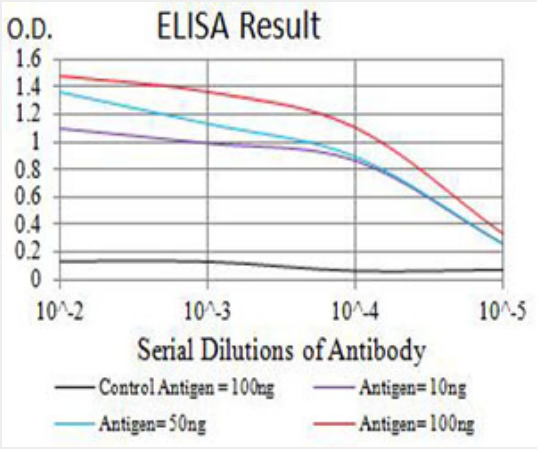

Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

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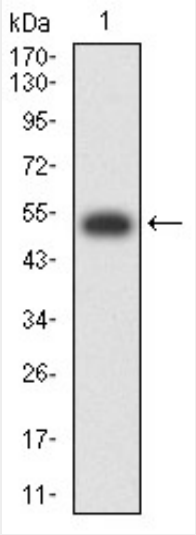

Figure 2:Western blot analysis using TNFSF11 mAb against human TNFSF11 (AA: 74-308) recombinant protein. (Expected MW is 52.6 kDa)

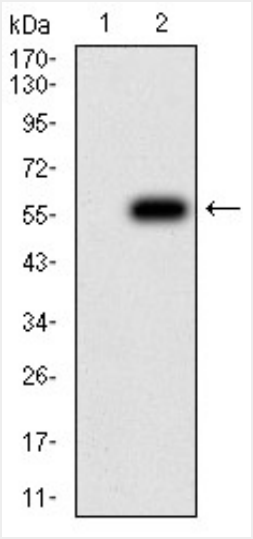

Figure 3:Western blot analysis using TNFSF11 mAb against HEK293 (1) and TNFSF11 (AA: 74-308)-hIgGFc transfected HEK293 (2) cell lysate.

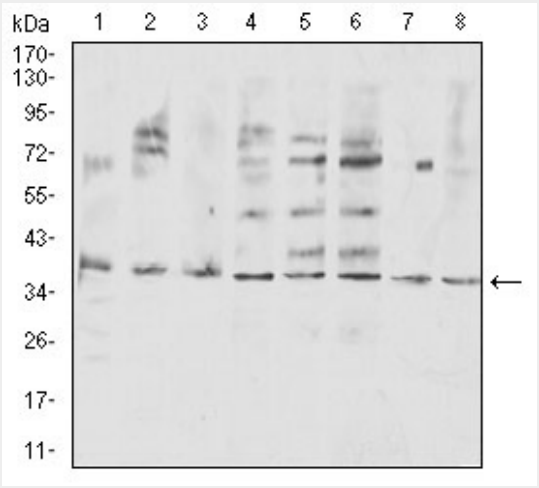

Figure 4:Western blot analysis using TNFSF11 mouse mAb against COS7 (1), Hela (2), U937 (3),

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

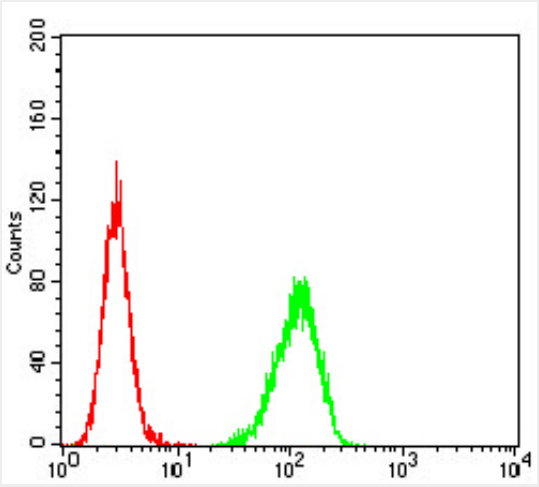

Figure 6:Flow cytometric analysis of Hela cells using TNFSF11 mouse mAb (green) and negative control (red).

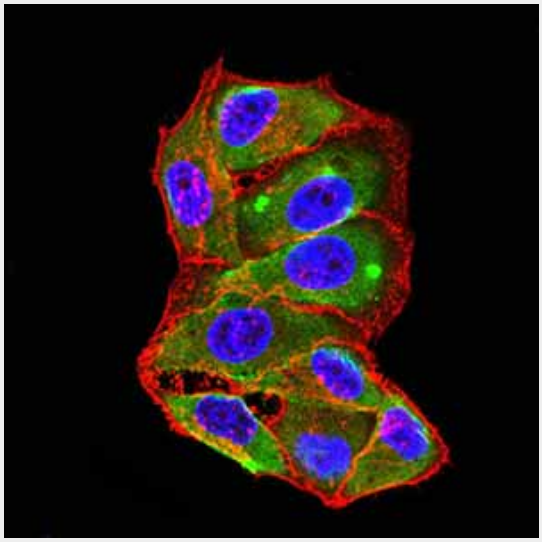

Figure 5:Immunofluorescence analysis of Hela cells using TNFSF11 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

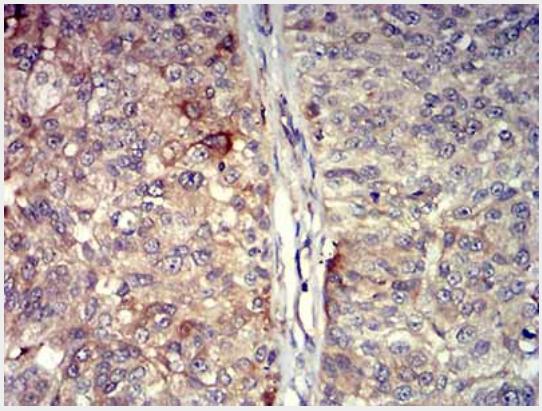

Figure 7:Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using TNFSF11 mouse mAb with DAB staining.

TNFSF11 - References

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