

TNFSF11
Purified Mouse Monoclonal Antibody
Catalog # AO2635a**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~~N/A

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

TNFSF11 - Images

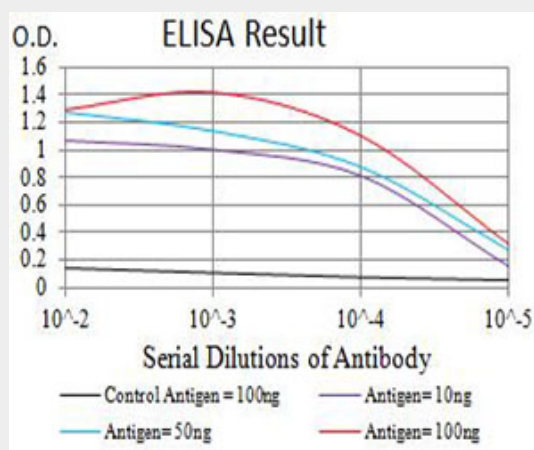


Figure 1: Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

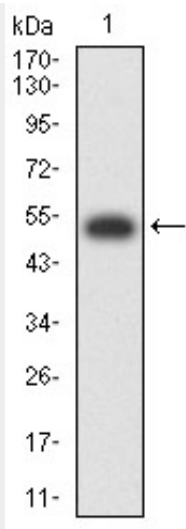


Figure 2: Western blot analysis using TNFSF11 mAb against human TNFSF11 (AA: 74-308) recombinant protein. (Expected MW is 52.6 kDa)

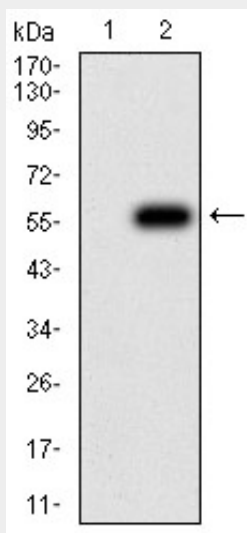


Figure 3: Western blot analysis using TNFSF11 mAb against HEK293 (1) and TNFSF11 (AA: 74-308)-hlgGfc transfected HEK293 (2) cell lysate.

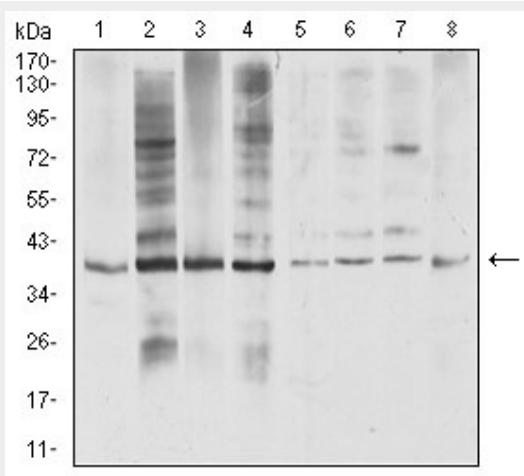


Figure 4: Western blot analysis using TNFSF11 mouse mAb against COS7 (1), HeLa (2), U937 (3),

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

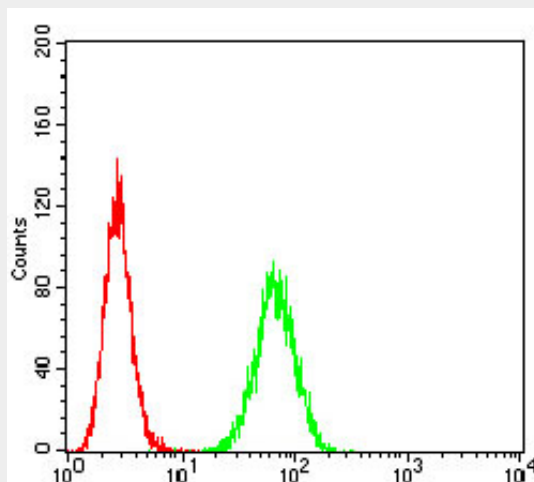


Figure 5:Flow cytometric analysis of Hela cells using TNFSF11 mouse mAb (green) and negative control (red).

TNFSF11 - References

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