

TNFSF11

Purified Mouse Monoclonal Antibody Catalog # AO2635a

Specification

TNFSF11 - Product Information

Application E, WB, FCM Primary Accession 014788

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

E~~ 1/10000

WB~~ 1/500 - 1/2000 FCM~~1/200 - 1/400

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
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

TNFSF11 - Images

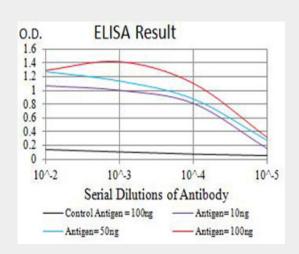


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



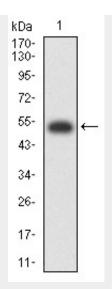


Figure 2:Western blot analysis using TNFSF11 mAb against human TNFSF11 (AA: 74-308) recombinant protein. (Expected MW is 52.6 kDa)

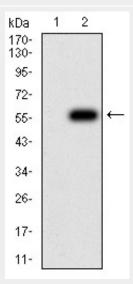


Figure 3:Western blot analysis using TNFSF11 mAb against HEK293 (1) and TNFSF11 (AA: 74-308)-hlgGFc transfected HEK293 (2) cell lysate.

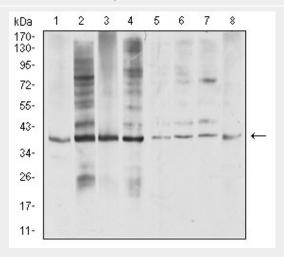


Figure 4:Western blot analysis using TNFSF11 mouse mAb against COS7 (1), Hela (2), U937 (3),



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

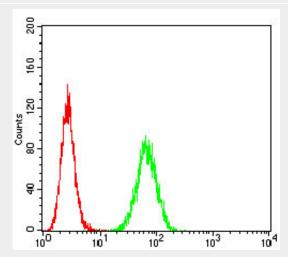


Figure 5:Flow cytometric analysis of Hela cells using TNFSF11 mouse mAb (green) and negative control (red).

TNFSF11 - References

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