10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# TNFSF11

Purified Mouse Monoclonal Antibody
Catalog # AO2635a

## Product Information

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| **Application** | WB, IHC, ICC, E |
| **Primary Accession** | O14788 |
| **Reactivity** | Human, Monkey |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 7G3D7 |
| **Isotype** | Mouse IgG1 |
| **Calculated MW** | 35478 |
| **Immunogen** | Purified recombinant fragment of human TNFSF11 (AA: 74-308) expressed in E. Coli. |
| **Formulation** | Purified antibody in PBS with 0.05% sodium azide |

## Additional Information

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| **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. |

## Protein Information

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| **Name** | TNFSF11 ( HGNC:11926) |
| **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 |

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| | 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 |

## References

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

## Images

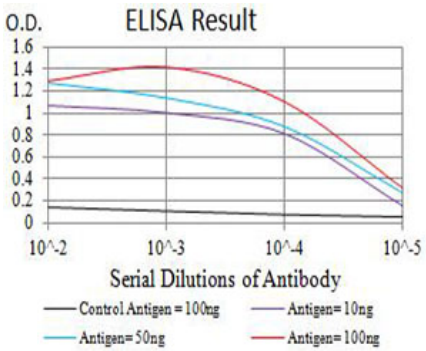



Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

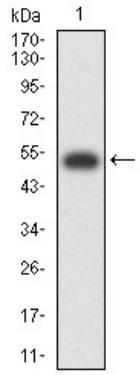
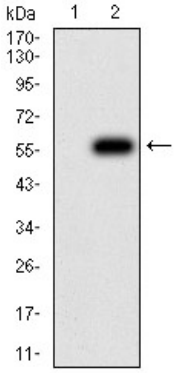



Figure 2:Western blot analysis using TNFSF11 mAb against human TNFSF11 (AA: 74-308) recombinant protein. (Expected MW is 52.6 kDa)

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



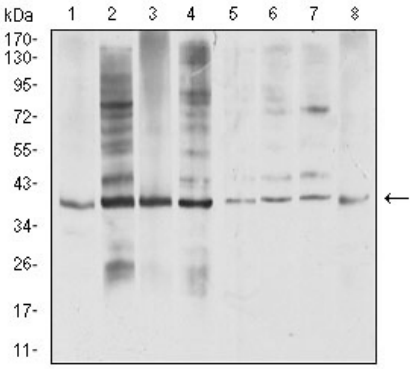




Figure 4:Western blot analysis using TNFSF11 mouse mAb against COS7 (1), Hela (2), U937 (3), HL-60 (4), Raji (5), Ramos (6), Jurkat (7), and SW480 (8) cell lysate.

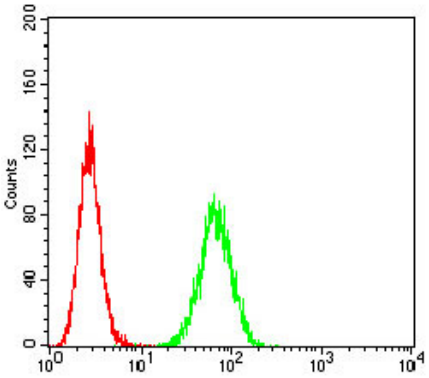



Figure 5:Flow cytometric analysis of Hela cells using TNFSF11 mouse mAb (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.