

## 10-6001: Monoclonal Antibody to OPG (Clone: ABM10D2 )

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|--------------------------------|--|
| <b>Clonality :</b>             | Monoclonal   |
| <b>Clone Name :</b>            | ABM10D2  |
| <b>Application :</b>           | FACS,WB  |
| <b>Reactivity :</b>            | Human  |
| <b>Gene :</b>                  | TNFRSF11B  |
| <b>Gene ID :</b>               | 4982   |
| <b>Uniprot ID :</b>            | O00300   |
| <b>Format :</b>                | Purified   |
| <b>Alternative Name :</b>      | Tumor necrosis factor receptor superfamily member 11B, Osteoclastogenesis inhibitory factor, Osteoprotegerin |
| <b>Isotype :</b>               | Mouse IgG1, Kappa  |
| <b>Immunogen Information :</b> | A partial length recombinant protein (a.a 15-206) of OPG was used as the immunogen for this antibody.        |

### Description

OPG (Osteoprotegerin) belongs to the TNF receptor super-family and is implicated in bone remodeling and in the atherosclerotic process. This molecule acts as a decoy receptor for the RANKL (Receptor Activator of Nuclear Factor-KappaB Ligand), inhibiting binding of RANKL to its receptor, RANK. OPG acts as a soluble neutralizing receptor of TRAIL (TNF-Related Apoptosis-Inducing Ligand), an anti-inflammatory molecule with anti-atherosclerotic properties. Mostly implicated in bone remodeling, the RANK/RANKL/OPG axis is involved in immune and vascular system. OPG has been associated with increased risk of atherosclerotic disease in the general population. OPG has also been associated with increased pulse wave velocity, progression of arterial calcification and with mortality in both end-stage renal failure patients as well as the general population.

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 25 µg / 100 µg  |
| <b>Purification :</b>      | Protein G Chromatography  |
| <b>Content :</b>           | 25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.                |
| <b>Storage condition :</b> | Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles. |

### Application Note

WB: 4-6 µg/ml, FACS: 0.5-1 µg/10<sup>6</sup>

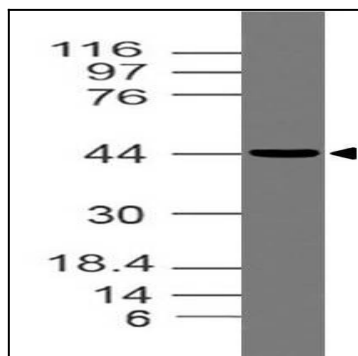


Fig-1: Western blot analysis of OPG. Anti-OPG antibody (Clone: ABM10D2) was used at 4  $\mu\text{g/ml}$  on Hela lysate.

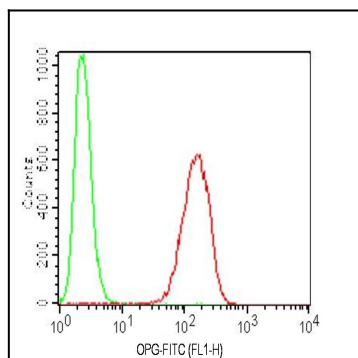


Fig-2: Intracellular Flow analysis of OPG antibody on Ramos cells using 0.5  $\mu\text{g}/10^6$  cells of anti-OPG antibody (ABM10D2). Green represents isotype control; red represents anti-OPG antibody. Goat anti-mouse FITC conjugate was used as secondary antibody. (Cells were fixed with 4% paraformaldehyde for 10 min and washed with PBS by centrifuging at 1100 for 5 min followed by permeabilization for 20 min and washed again as mentioned above. Then cell were incubated with primary antibody for 45 min. and after washing the cells twice in PBS, incubated with conjugated secondary antibody for 30 min. Data acquisition was done after washing twice with PBS as mentioned above).