

# Mouse Osteoclast differentiation factor (ODF) ELISA Kit



Catalog No: #EK12193

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Package Size: #EK12193-1 48T #EK12193-2 96T

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## Description

Product Name	Mouse Osteoclast differentiation factor (ODF) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse ( <i>Mus musculus</i> )
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

## Application Details

Detect Range:7.81-500 pg/mL

Sensitivity:3.1 pg/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate ODF in samples. An antibody specific for ODF has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyODF present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for ODF is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of ODF bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**RANKL a member of the tumor necrosis factor (TNF) cytokine family which is a ligand for osteoprotegerin and functions as a key factor for osteoclast differentiation and activation. This protein was shown to be a dentritic cell survival factor and is involved in the regulation of T cell-dependent immune response. T cell activation was reported to induce expression of this gene and lead to an increase of osteoclastogenesis and bone loss. This protein was shown to activate antiapoptotic kinase AKT/PKB through a signaling complex involving SRC kinase and tumor necrosis factor receptor-associated factor (TRAF) 6, which indicated this protein may have a role in the regulation of cell apoptosis. Targeted disruption of the related gene in mice led to severe osteopetrosis and a lack of osteoclasts.

Note: This product is for in vitro research use only