

**Datasheet for KOA0757****Rat RANK ELISA Kit****Overview**

|                      |                                         |
|----------------------|-----------------------------------------|
| <b>Description:</b>  | Rat RANK AccuSignal ELISA Kit - KOA0757 |
| <b>Item No.:</b>     | KOA0757                                 |
| <b>Size:</b>         | 1 Kit                                   |
| <b>Applications:</b> | ELISA                                   |
| <b>Reactivity:</b>   | Rat                                     |
| <b>Range:</b>        | 62.5 pg/ml - 4000 pg/ml                 |

**Product Details**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <b>Background:</b>         | Receptor Activator of Nuclear Factor $\kappa$ B (RANK), also known as TRANCE Receptor, is a type I membrane protein that is expressed on the surface of osteoclasts and is involved in their activation upon ligand binding. RANK is a recently described TNF receptor family member, and its ligand, RANKL, promote survival of dendritic cells and differentiation of osteoclasts. RANK contains 383 amino acids in its intracellular domain(residues 234-616), which contain three putative TRAF-binding domains(termed I, II, and III). RANK interacts with various TRAFs through distinct motifs and activates NF- $\kappa$ B via a novel TRAF6 interaction motif, which then activates NIK, thus leading to NF- $\kappa$ B activation, whereas RANK most likely activates JNK through a TRAF2-interacting region in RANK. The standard in this kit is recombinant human RANK with the sequence of Q29-G213 aa. It is a dipolymer which compose of two chains, and the molecular weight of each is 48kda. |
| <b>Synonyms:</b>           | CD265, FEO, LOH18CR1, Loss of heterozygosity 18 chromosomal region 1, ODFR, OFE, OPTB7, Osteoclast differentiation factor receptor, OSTs, PDB2, Receptor activator of NF- $\kappa$ B, Receptor activator of nuclear factor kappa B, TNFRSF11A, TNFR11_HUMAN, TRANCER, Tumor necrosis factor receptor superfamily member 11A, Tumor necrosis factor receptor superfamily member 11a activator of NF $\kappa$ B, Tumor necrosis factor receptor superfamily member 11a NF $\kappa$ B activator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Detection Kit Type:</b> | ELISA Kit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Detection Range:</b>    | 62.5 pg/ml - 4000 pg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Sensitivity:</b>        | <10 pg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

**Target Details**

**Gene Name:** TNFRSF11A

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| <b>Reactivity:</b>         | Rat                                                                                                                                                                                                                       |
| <b>Immunogen:</b>          | Expression system for standard: NSO; Immunogen sequence: Q30-P213                                                                                                                                                         |
| <b>Purity/Specificity:</b> | Natural and recombinant rat RANK. There is no detectable cross-reactivity with other relevant proteins.                                                                                                                   |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - F1M8Z6</a></li><li>• <a href="#">NCBI - NP_001258164.1</a></li><li>• <a href="#">GeneID - 498206</a></li><li>• <a href="#">KOA0757 Protocol</a></li></ul> |

## Application Details

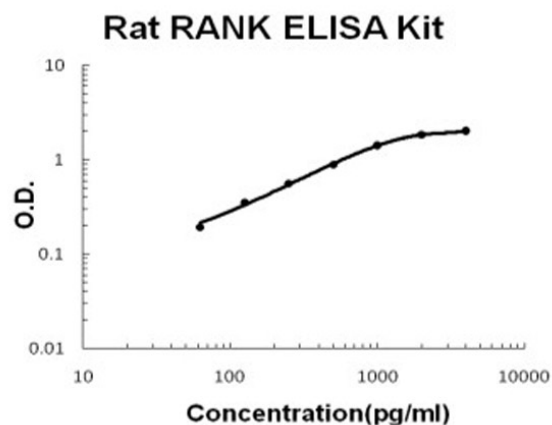
|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| <b>Tested Applications:</b> | ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Application Note:</b>    | Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 4000pg/ml, 2000pg/ml, 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml rat RANK standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of rat cell culture supernates or serum to each empty well. It is recommended that each rat RANK standard solution and each sample be measured in duplicate. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Formulation

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                               |
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| <b>Shipping Condition:</b> | Wet Ice                                                                                                                                                                                                                                                                                                                       |
| <b>Storage Condition:</b>  | Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing. |
| <b>Expiration:</b>         | See kit insert for complete instructions.                                                                                                                                                                                                                                                                                     |

## Images

**ELISA**

Rat RANK ELISA Kit standard curve.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.