

## Datasheet: AHP1209B

<b>Description:</b>	RABBIT ANTI HUMAN CD254:Biotin
<b>Specificity:</b>	CD254
<b>Other names:</b>	sRANKL
<b>Format:</b>	Biotin
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	50 µg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin	▪			
ELISA	▪			0.15 - 0.30ug/ml
Immunoprecipitation			▪	
Western Blotting	▪			0.1 - 0.2ug/ml

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG conjugated to Biotin - lyophilised
<b>Reconstitution</b>	Reconstitute with 1.0ml sterile PBS containing 0.1% Bovine Serum Albumin. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. For long term storage the addition of 0.09% sodium azide is recommended.
<b>Antiserum Preparation</b>	Antisera to human CD254 were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG prepared by affinity chromatography.
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	None present
<b>Approx. Protein Concentrations</b>	IgG concentration 50ug/ml

**Immunogen** Recombinant human CD254.

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**External Database Links**

**UniProt:**  
[O14788](#)   [Related reagents](#)

**Entrez Gene:**  
[8600](#) TNFSF11   [Related reagents](#)

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**Synonyms** OPGL, RANKL, TRANCE

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**Specificity**

**Rabbit anti Human CD254 antibody** recognizes the soluble form of human CD254, otherwise known as sRANKL, a ~20 kDa glycoprotein and member of the Tumour Necrosis Factor (TNF) superfamily, generated by proteolytic processing of the full-length CD254 membrane protein.

CD254 is highly expressed by T lymphocytes and osteoblastic cells and plays a key role in the differentiation and activation of osteoclast precursors, acting as a ligand for both receptor activator of NF-KBeta (RANK) and the decoy receptor osteoprotegerin (OPG), which act as antagonists. Binding of CD254 to RANK is essential for the activation of osteoclastogenesis, stimulated by factors such as TNF-alpha, IL-1beta, IL-6 and IL-17, whereas binding to OPG neutralizes CD254, thereby inhibiting osteoclastogenesis.

CD254 augments the dendritic cell (DC) stimulation of naïve T cell proliferation and may be involved in the regulation of DC-T cell interactions. CD254 is also involved in apoptosis, through activation of the antiapoptotic kinase AKT/PKB and the mTOR/S6K signalling pathway.

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**Further Reading**

1. Boyle, W.J. *et al.* (2003) Osteoclast differentiation and activation. [Nature. 423 \(6937\): 337-42.](#)

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**Storage**

Prior to reconstitution store at +4°C.  
After reconstitution store at -20°C.  
Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Shelf Life**

12 months from date of reconstitution.

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**Health And Safety Information**

Material Safety Datasheet documentation #10162 available at:  
10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

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**Regulatory**

For research purposes only

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