



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

# Ret Antibody

#3220 Store at -20C

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, W-S, IP	H	Endogenous	150, 175	Rabbit	#P07949	5979

## Product Usage Information

### Application

Western Blotting  
Simple Western™  
Immunoprecipitation

### Dilution

1:1000  
1:10 - 1:50  
1:25

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

## Specificity/Sensitivity

Ret Antibody detects endogenous levels of total Ret protein.

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Thr1085 of human Ret. Antibodies are purified by protein A and peptide affinity chromatography.

## Background

The Ret proto-oncogene (c-Ret) is a receptor tyrosine kinase that functions as a multicomponent receptor complex in conjunction with other membrane-bound, ligand-binding GDNF family receptors (1). Ligands that bind the Ret receptor include the glial cell line-derived neurotrophic factor (GDNF) and its congeners neurturin, persephin, and artemin (2-4). Research studies have shown that alterations in the corresponding *RET* gene are associated with diseases including papillary thyroid carcinoma, multiple endocrine neoplasia (type 2A and 2B), familial medullary thyroid carcinoma, and a congenital developmental disorder known as Hirschsprung's disease (1,3). The Tyr905 residue located in the Ret kinase domain plays a crucial role in Ret catalytic and biological activity. Substitution of Phe for Tyr at position 905 dramatically inhibits Ret autophosphorylation activity (5).

## Background References

1. Airaksinen, M.S. et al. (1999) *Mol Cell Neurosci* 13, 313-25.
2. Takahashi, M. et al. (1989) *Oncogene* 4, 805-6.
3. Manié, S. et al. (2001) *Trends Genet* 17, 580-9.
4. Tallini, G. and Asa, S.L. (2001) *Adv Anat Pathol* 8, 345-54.
5. Iwashita, T. et al. (1999) *Oncogene* 18, 3919-22.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

## Applications Key

**W:** Western Blotting **W-S:** Simple Western™ **IP:** Immunoprecipitation

## Cross-Reactivity Key

**H:** Human

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