



## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

#### **Rabbit Anti Human CD271 With HRP-Conjugated Second Antibody**

**Catalog No.**  
DS-PB-00434

**Target Species**  
Human

**Isotype**  
Polyclonal IgG

#### ***Preparation***

**Preparation:** Antisera to CD271 were raised by repeated immunizations of rabbits with highly purified antigen. Purified IgG prepared by affinity chromatography.

**Immunogen:** Recombinant human CD271

#### ***Specificity***

DS-PB-00434 recognises CD271, a transmembrane protein of 70-75kDa, otherwise known as Nerve Growth Factor Receptor (NGFR). It is a pro-apoptotic member of the tumor necrosis factor receptor (TNFR) family and its ligands include NGF, brain derived growth neurotrophic factor (BDNF), NT3 and NT4.

CD271 has been shown to interact with tropomyosin-receptor-kinase A (TrkA) forming the high-affinity NGF receptor, while CD271 can signal alone, constituting the low-affinity NGF receptor. When signaling alone, CD271 is involved in apoptosis, neurite outgrowth during development and myelination.

Mutations and changes in CD271 expression have been implicated in various pathological diseases including Alzheimer's Disease, cerebral oedema and retinoblastoma.

**Western Blot:** Detects a band of approximately 75-80kDa in A-20 cell lysate.

**Species Cross Reactivity:** Mouse \*reactivity and working conditions may vary between species.

#### ***Formulation***

**Product Type:** Polyclonal Antibody

**Product Form:** Purified IgG – liquid

**Preservative Stabilizers:** 0.02% Sodium Azide

**Buffer Solution:** Phosphate buffered saline

**Approx. Protein Concentration:** IgG concentration 1.0mg/ml

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### Applications

Table Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA			.	
Western Blotting	.			1ug/ml
Immunohistology - frozen			.	
Immunohistology - paraffin			.	
Flow Cytometry			.	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

### Secondary Antibody Applications

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blot)	.			1:5000-1:10000

### References

1. Johnson, D. *et al.* (1986) Expression and structure of the human NGF receptor. *Cell*. 47: 545-554.
2. Nykjaer, A. *et al.* (2005) p75NTR- live or let die. *Curr. Opin. Neurobiol.* 15: 49-57.
3. Schor, N. (2005) The p75 neurotrophin receptor in human development and disease. *Prog. Neurobiol.* 77: 201-214.

### Storage

Store at +4°C or at -20°C if preferred. 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.

**Shelf Life:** 18 months from date of dispatch.

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