



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Rabbit anti CONNEXIN 43 (C-terminal)

With HRP-conjugated Secondary Antibody

Catalog No.
DS-PB-00531

Species
Rat

Isotype
IgG

Preparation

- **Immunogen:** Synthetic peptide corresponding to the C-terminal region of rat connexin 43 (CT).
- **Preparation:** Antisera to rat connexin 43 (CT) were raised by repeated immunizations of rabbit with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography.

Specificity

- DS-PB-00531 recognizes rat connexin43, a 43 kDa member of the Alpha-type (group II) subfamily of the connexins. It is a component of gap junctions, the small channels linking the cytoplasm of adjacent cells and enabling signaling through the transfer of ions and metabolites. Phosphorylation of Connexin 43 at serine 368 regulates the permeability of the gap junction.
- Connexin 43 is the major protein of gap junctions in the heart, essential to synchronized contractions. It is also crucial in embryonic development and is associated with epilepsy.
- **Species Cross Reactivity:** Based on sequence similarity, is expected to react with: Sheep, Zebrafish, Human, Chicken, Mouse, Primate, Dog, Birds, Xenopus.
* Antibody reactivity and working conditions may vary between species

Formulation

- **Product Type:** Polyclonal Antibody
- **Product Form:** Purified IgG – liquid
- **Buffer Solution:** 10 mM Hepes pH 7.5, 150 mM NaCl
- **Preservative & Stabilizers:** 0.09 % Sodium Azide, 0.01 % Bovine Serum Albumin, 50 % Glycerol

Storage

- Store at 4°C or at -20°C if preferred.
- This product should be stored undiluted. Storage in frost free freezers is not recommended.
- **Should this product contain a precipitate we recommend microcentrifugation before use. Avoid repeated freezing and thawing.**
- **Shelf Life:** 12 months from date of shipment.

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



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Reference

- Bao, X. et al. (2004) Regulation of purified and reconstituted connexin 43 hemichannels by protein kinase C-mediated phosphorylation of Serine 368. J. Biol Chem. 279:20058-66.
- Aronica, E. et al. (2001) Expression of connexin 43 and connexin 32 gap-junction proteins in epilepsy-associated brain tumors and in the perilesional epileptic cortex. Acta Neuropathol (Berl) 101:449-459.

Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA			•	
Western Blotting (1)	•			1 : 1,000
Flow Cytometry			•	
Immunohistology Frozen			•	
Immunohistology - paraffin			•	
Immunohistology - resin			•	
Immunoprecipitation			•	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.
(1) DS-PB-00531 detects a band of approximately 43kDa in rat cerebellar lysate.

Secondary Antibody Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blotting)	•			1:5,000-1:10,000

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