RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Rabbit Anti Natriuretic Peptide Receptor-C (NPR-C) (a.a. 199-212)

Catalog No.	**Species**	**Isotype**
MD-14-0462	Human	Rabbit IgG

Background

The natriuretic peptides are a group of structurally similar peptides that are genetically distinct and play a role in several processes, including cardiovascular, renal and endocrine homeostasis. The atrial natriuretic peptide (ANP) and brain natriuretic peptide (BNP) are derived from myocardial cell origin and are cardiac hormones secreted from the atrium and ventricle of the heart, respectively. The C-type natriuretic peptide (CNP) is derived from endothelial cell origin and acts as an endothelium-derived relaxing factor (EDRF). These peptides mediate their effects through three receptors, which are approximately 130 kDa in mass. NPR-A (also designated GC-A) binds both ANP and BNP, which stimulates 3',5'-cyclic guanosine monophosphate (cGMP) to mediate natriuresis, vasodilation, renin inhibition, antimitogenesis and lusitropic properties. NPR-B (also designated GC-B) binds CNP and also stimulates cGMP to facilitate vasodilation and growth inhibition. NPR-C, also designated the 'clearance' receptor, clears all three peptides, which are subsequently degraded by the ectoenzyme neutral endopeptidase. The natriuretic peptide system plays an important role in hypertension, congestive heart failure, atherosclerosis and renal diseases, and it may be therapeutic targets in the treatment of these diseases.

Specificity

This antibody recognizes synthetic human NPR-C peptide (199-212).

Formulation

Lyophilized powder, reconstitute in 20ul double distilled water.

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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	.			
IFA			.	
IHC			.	
Neutralization			.	

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

Preparation

Rabbit Antibody to Human Natriuretic Peptide Receptor-C (NPR-C), amino acids 199-212 is prepared using synthetic human NPR-C (QEEGLHSIYSFDET) poly-Lysine conjugated as its immunogen.

Storage

Store lyophilized product at 2-8°C. After reconstitution, store at –20°C. Avoid multiple freeze/thaw cycles.
Please avoid freeze-thaw cycles.Vial Contains Small Quantity. Centrifuge Product before Opening!

Reference

1) Itoh, H., Suga, S., Ogawa, Y., Tanaka, I., and Nakao, K. 1993. Molecular biology and pharmacology of natriuretic peptide system. Nippon. Rinsho. 51: 1548-1556.
2) Itoh, H. and Nakao, K. 1997. Natriuretic peptide system. Nippon. Rinsho. 55: 1923-1936.
3) Anand-Srivastava, M.B. 1997. Atrial natriuretic peptide-C receptor and membrane signalling in hypertension. J. Hypertens. 15: 815-826.