

RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Chicken Anti-Human Neurokinin A Antibody

Catalog No:	Isotype:	Species:	Accession No:	
130-00019	Chicken IgG	Human	P20366	

Description

Neurokinin A, formerly known as Substance K, is a neurologically active peptide translated from the pre-protachykinin gene. Neurokinin A has many excitatory effects on mammalian nervous systems and is also influential on the mammalian inflammatory and pain responses. Neurokinin A is present in excitatory neurons and secretory cells of the hypothalamic–pituitary–adrenal axis. Additionally, neurokinin A is found in the neurosensory system and modulates a wide range of inflammatory and tissue repairing processes. Inflammation, tissue healing and cell proliferation has been linked to neurokinin A release into surrounding tissues.

Applications

Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:64,000
Western Blotting			*	
Enzyme Immunoassay(EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

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



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Preparation

The immunogen was a synthetic peptide. This antibody was produced from a rabbit immunized with this peptide conjugated with KLH. The IgG fraction was purified from rabbit serum by Protein G affinity chromatography.

Specificity

This antibody specifically binds to human Neurokinin A. Cross reactivity with mouse and rat Neurokinin A was not tested.

Reconstitution

Product is supplied as a powder obtained from lyophilization of purified antibody in PBS without preservatives. Reconstitute the antibody with sterile 1 x PBS to a final concentration of 1 mg/ml.

Storage

Store at 4°C if intended for use within one month, otherwise, store at -20°C to -80°C. The lyophilized antibody is stable for at least 18 months after the date of receipt when stored at -20°C to -80°C. After reconstitution, it can be aliquoted and stored frozen at -20°C to -80°C in a manual defrost freezer for 6 months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for 1 month at 4°C. **Please avoid freeze-thaw cycles, as this will lower the activity of the antibody.**

Reference

Chandrashekar, IR.; and Cowsik, SM.; (2003). "Three-dimensional structure of the mammalian tachykinin peptide neurokinin A bound to lipid micelles". *Biophys. J.* **85** (6): 4002–11.

Sun, J.; et al. (2008) "Neurokinin A engages neurokinin-1 receptor to induce NF-kappaB-dependent gene expression in murine macrophages: implications of ERK1/2 and PI 3-kinase/Akt pathways." Am J Physiol Cell Physiol. 295(3):C679-91