RayBiotech, Inc.

3607 Parkway Lane suite 200
Norcross,GA 30092
Tel: 770-729-2992, 1-888-494-8555
Fax: 770-206-2393
Website: www.raybiotech.com
Email: info@raybiotech.com

Certificate of Analysis and Data Sheet

Rabbit anti-HTRA2/Omi antibody

Catalog No.	Isotype:	Speceis:	Accession No:
130-10034	Rabbit Ig G	Human	O43464

Description

HTRA2 also called Omi is a mammalian serine protease at high temperatures and has a chaperone activity at low temperature. The full-length HTRA2 is synthesized as a precursor protein and then targeted to the mitochondria where it is matured by the removal of N-terminal 133 residues. Mature HTRA2 consists of a putative transmembrane domain; an inhibitor of apoptosis protein (IAP)-binding motif; a single C-terminal PDZ domain that mediates protein-protein interactions. Recently, HTRA2 has known to contribute both to caspase-dependent and caspase-independent cell death.

Defects in HTRA2 are the cause of Parkinson disease type 13. A complex neurodegenerative disorder characterized by bradykinesia, resting tremor, muscular rigidity and postural instability, as well as by a clinically significant response to treatment with levodopa. The pathology involves the loss of dopaminergic neurons in the substantia nigra and the presence of Lewy bodies (intraneuronal accumulations of aggregated proteins), in surviving neurons in various areas of the brain.

Applications

Table Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:160000 (at least detecting 6.25ng/ml)
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.

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

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Preparation

Immunogen was synthetic peptide derived from human HTRA2/Omi. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum followed by Protein A/G affinity chromatography.

Binding Activity

The antibody can specifically bind to its immunogen, and did not show any cross reactivity with unrelated antigens in ELISA. The specificity for binding to recombinant protein, cellular protein and native antigen is not defined. Cross reactivity with mouse and rat HTRA2 was not tested yet.

Reconstitution

Supplied as lyophilized and purified antibody originally containing PBS, without **Preservative Stabilizers,** liking Sodium Azide. *It final concentration is indicated in shipping vial*.

The antibody is stable for at least years from the data of receipt when stored at -20^{0}C to -70^{0}C. Reconstituted antibody (suggesting with sterile PBS) can also be aliquotted and stored frozen at -20^{0}C to -70^{0}C in a manual defrost freezer for months without detectable loss activity. Upon reconstitution, the antibody can also be stored over months at 4^{0}C. **Please avoid freeze-thaw cycles.**

Storage

Keep it at 4^{0}C if intended for use within a month. Store at -20^{0}C if over months. M**inimize freezing and thawing when use**.

Related products

1. Rabbit Anti-Human HTRA2 (C-terminus)(cat# DS-PB-02627)
2. Custom Human HTRA2 ELISA Kit,(cat#ELH-HTRA2-001)
3. Recombinant Human HTRA2 (cat#228-10807-3)

Reference

Strauss, K. M. et al. (2005) Loss of function mutations in the gene encoding Omi/HtrA2 in Parkinson's disease. Human Molecular Genetics 14:2099-2111.

Suzuki, Y. et al. (2001) A Serine Protease, HtrA2, is released from the mitochondria and interacts with XIAP, inducing cell death. Mol. Cell. 8:613-621.