10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FoxP2 Recombinant Rabbit mAb

Catalog # AP98672

Product Information

Application	WB, IHC-P, IHC-F, IF, IP, E
Primary Accession	O15409
Other Accession	O15409
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	79919
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 C2H2-type zinc finger. Contains 1 fork-head DNA-binding domain.
DISEASE	Defects in FOXP2 are the cause of speech-language disorder 1 (SPCH1) [MIM:602081]; also known as autosomal dominant speech and language disorder with orofacial dyspraxia. Affected individuals have a severe impairment in the selection and sequencing of fine orofacial movements, which are necessary for articulation. They also show deficits in several facets of language processing (such as the ability to break up words into their constituent phonemes) and grammatical skills. Note=A chromosomal aberration involving FOXP2 is a cause of severe speech and language impairment. Translocation t(5;7)(q22;q31.2).
Background Descriptions	This gene encodes a member of the forkhead/winged-helix (FOX) family of transcription factors. It is expressed in fetal and adult brain as well as in several other organs such as the lung and gut. The protein product contains a FOX DNA-binding domain and a large polyglutamine tract and is an evolutionarily conserved transcription factor, which may bind directly to approximately 300 to 400 gene promoters in the human genome to regulate the expression of a variety of genes. This gene is required for proper development of speech and language regions of the brain during embryogenesis, and may be involved in a variety of biological pathways and cascades that may ultimately influence language development. Mutations in this gene cause speech-language disorder 1 (SPCH1), also known as autosomal dominant speech and language disorder with orofacial dyspraxia. Multiple alternative transcripts encoding different isofor

Additional Information

Gene ID	93986
Other Names	CAGH44; SPCH1; TNRC10; 2810043D05Rik; CAG-16; D0Kist7; RGD1559697; FOXP2_HUMAN; FOXP2; CAG repeat protein 44; Trinucleotide repeat-containing gene 10 protein; FOXP2_MOUSE; FOXP2_RAT; forkhead box P2; trinucleotide repeat containing 10; forkhead/winged-helix transcription factor; speech and language disorder 1; Forkhead box protein P2

Dilution	IHC-P=1:50-200,IHC-F=1:50-200,WB=1:500-2000,IF=1:50-200,ELISA=1:5000-10000,IP=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	FOXP2
Synonyms	CAGH44, TNRC10
Function	Transcriptional repressor that may play a role in the specification and differentiation of lung epithelium. May also play a role in developing neural, gastrointestinal and cardiovascular tissues. Can act with CTBP1 to synergistically repress transcription but CTPBP1 is not essential. Plays a role in synapse formation by regulating SRPX2 levels. Involved in neural mechanisms mediating the development of speech and language.
Cellular Location	Nucleus.
Tissue Location	Isoform 1 and isoform 6 are expressed in adult and fetal brain, caudate nucleus and lung.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.