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

FOXP2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5753B

Product Information

Application	WB, IF, E
Primary Accession	O15409
Other Accession	P0CF24, P58463, NP_055306.1
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21207
Calculated MW	79919
Antigen Region	657-684

Additional Information

Gene ID	93986
Other Names	Forkhead box protein P2, CAG repeat protein 44, Trinucleotide repeat-containing gene 10 protein, FOXP2, CAGH44, TNRC10
Target/Specificity	This FOXP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 657-684 amino acids of human FOXP2.
Dilution	WB~~1:1000 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FOXP2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

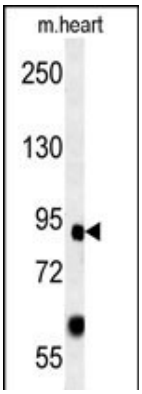
Background

FOXP2 is 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 isoforms have been identified in this gene.

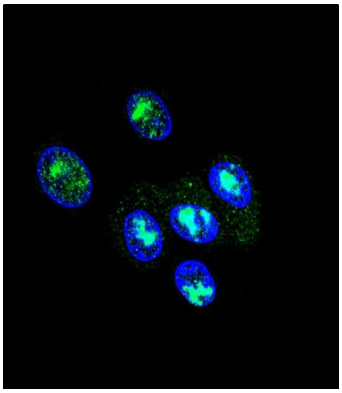
References

Lai, C.S., et al. Nature 413(6855):519-523(2001) Lai, C.S., et al. Am. J. Hum. Genet. 67(2):357-368(2000) Margolis, R.L., et al. Hum. Genet. 100(1):114-122(1997) Hurst, J.A., et al. Dev Med Child Neurol 32(4):352-355(1990)

Images



FOXP2 Antibody (C-term) (Cat. #AP5753b) western blot analysis in mouse heart tissue lysates (15ug/lane).This demonstrates the FOXP2 antibody detected FOXP2 protein (arrow).



Confocal immunofluorescent analysis of FOXP2 Antibody (C-term)(Cat#AP5753b) with HepG2 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

Citations

- Common Origin of the Cerebellar Dual Somatotopic Areas Revealed by Tracking Embryonic Purkinje Cell Clusters with Birthdate Tagging
- The effect of journal guidelines on the reporting of antibody validation
- Clustered fine compartmentalization of the mouse embryonic cerebellar cortex and its rearrangement into the postnatal striped configuration.
- Spatial rearrangement of Purkinje cell subsets forms the transverse and longitudinal compartmentalization in the mouse embryonic cerebellum.

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