

FOXP2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5753B

Product Information

Application WB, IF, E Primary Accession 015409

Other Accession <u>P0CF24</u>, <u>P58463</u>, <u>NP 055306.1</u>

Reactivity Human, Mouse

Predicted Rat
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.

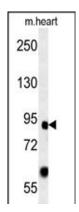
Background

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.

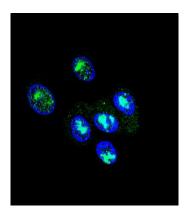
References

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
- Spatial rearrangement of Purkinje cell subsets forms the transverse and longitudinal compartmentalization in the mouse embryonic cerebellum.
- <u>Clustered fine compartmentalization of the mouse embryonic cerebellar cortex and its rearrangement into the postnatal striped configuration.</u>

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