

FOXP2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5753B

Specification

FOXP2 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region IF, WB,E <u>O15409</u> <u>POCF24</u>, <u>P58463</u>, <u>NP_055306.1</u> Human, Mouse Rat Rabbit Polyclonal Rabbit IgG 657-684

FOXP2 Antibody (C-term) - 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 IF~~1:10~50 WB~~1:1000

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.

FOXP2 Antibody (C-term) - 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.

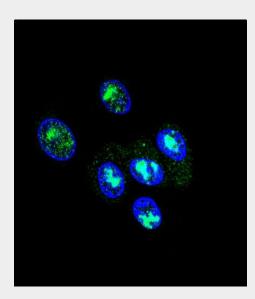
Tissue Location Isoform 1 and isoform 6 are expressed in adult and fetal brain, caudate nucleus and lung.

FOXP2 Antibody (C-term) - Protocols

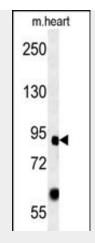
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

FOXP2 Antibody (C-term) - Images



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



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).

FOXP2 Antibody (C-term) - 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.

FOXP2 Antibody (C-term) - 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)

FOXP2 Antibody (C-term) - Citations

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