

FOXP2 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1619a

Specification

FOXP2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description** WB, E <u>015409</u> Human Mouse Monoclonal IgG1 85kDa KDa

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 isoforms have been identified in this gene.

Immunogen

Purified recombinant fragment of human MAPK3 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

FOXP2 Antibody - Additional Information

Gene ID 93986

Other Names Forkhead box protein P2, CAG repeat protein 44, Trinucleotide repeat-containing gene 10 protein, FOXP2, CAGH44, TNRC10

Dilution WB~~1/500 - 1/2000 E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions



FOXP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FOXP2 Antibody - 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.

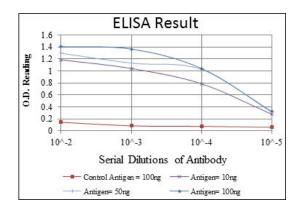
Cellular Location Nucleus.

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

FOXP2 Antibody - Protocols

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

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





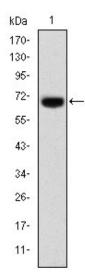


Figure 1: Western blot analysis using FOXP2 mAb against human FOXP2 (AA: 47-287) recombinant protein. (Expected MW is 52.8 kDa)

FOXP2 Antibody - References

1. Nature. 2009 Nov 12;462(7270):213-7. 2. Mol Biol Evol. 2009 Oct;26(10):2181-4.