



Rabbit Anti-FOXP2 antibody

SL16173R

Product Name:	FOXP2
Chinese Name:	叉头蛋白P2抗体
Alias:	CAG repeat protein 44; CAGH44; DKFZp686H1726; Forkhead box P2; Forkhead box protein P2; forkhead/winged-helix transcription factor; FOX P2; FOXP2; FOXP2_HUMAN; HGNC11222; HGNC11956; SPCH 1; SPCH1; TNRC 10; TNRC10; trinucleotide repeat containing 10; Trinucleotide repeat containing gene 10 protein; Trinucleotide repeat-containing gene 10 protein.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Rabbit,Bird
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	80kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FOXP2:551-650/715
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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.[provided by RefSeq, Feb 2010]

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. Involved in neural mechanisms mediating the development of speech and language.

Subcellular Location:

Nucleus.

Tissue Specificity:

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

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).

Similarity:

Contains 1 C2H2-type zinc finger.

Contains 1 fork-head DNA-binding domain.

SWISS:

O15409

Gene ID:

93986

Database links:

[Entrez Gene: 93986](#) Human

[Entrez Gene: 114142](#) Mouse

[Entrez Gene: 500037](#) Rat

[Omim: 605317](#) Human

[SwissProt: O15409](#) Human

[SwissProt: P58463](#) Mouse

[SwissProt: P0CF24](#) Rat

[Unigene: 282787](#) Human

[Unigene: 332919](#) Mouse

[Unigene: 134464](#) Rat

[Unigene: 225249](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.