




Anti-FOXP2 antibody ab58599

2 References

Overview

Product name	Anti-FOXP2 antibody
Description	Goat polyclonal to FOXP2
Host species	Goat
Specificity	This antibody is expected to recognize isoform I (NP_055306.1), isoform II (NP_683696.1) and isoform III (NP_683697.1 and NP_683698.1).
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Cow, Cat, Dog, Pig, Chimpanzee, Zebrafish, Rhesus monkey, Gorilla, Orangutan 
Immunogen	Synthetic peptide corresponding to Human FOXP2 aa 576-589 (internal sequence). NP_055306.1; NP_683696.2; NP_683697.2; NP_683698.2; NP_001166237.1 Sequence: C-DEVEYQKRRSQKIT <div>  Run BLAST with  Run BLAST with </div>
Positive control	WB: Human Brain (Cerebellum) and rat brain lysate. IHC-P: Human prostate and placenta tissue.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
Purity	Immunogen affinity purified

Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab58599 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 2.5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

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 CTBP1 is not essential. Involved in neural mechanisms mediating the development of speech and language.

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

Involvement in 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).

Sequence similarities Contains 1 C2H2-type zinc finger.
Contains 1 fork-head DNA-binding domain.

Developmental stage Expressed in the brain at 15 and 22 weeks of gestation, with a pattern of strong cortical, basal ganglia, thalamic and cerebellar expression. Highly expressed in the head and tail of nucleus caudatus and putamen. Restricted expression within the globus pallidus, with high levels in the pars interna, which provides the principal source of output from the basal ganglia to the nucleus centrum medianum thalami (CM) and the major motor relay nuclei of the thalamus. In the thalamus, present in the CM and nucleus medialis dorsalis thalami. Lower levels are observed in the nuclei anterior thalami, dorsal and ventral, and the nucleus parafascicularis thalami. Expressed in the ventrobasal complex comprising the nucleus ventralis posterior lateralis/medialis. The ventral tier of the thalamus exhibits strong expression, including nuclei ventralis anterior, lateralis and posterior lateralis pars oralis. Also expressed in the nucleus subthalamicus bilaterally and in the nucleus ruber.

Domain The leucine-zipper is required for dimerization and transcriptional repression.

Cellular localization Nucleus.

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