abcam

Product datasheet

Anti-FOXP2 antibody ab16046

★★★★★ 15 Abreviews 61 References 7 图像

概述

产品名称	Anti-FOXP2抗体
描述	**兔多克隆抗体**to FOXP2
宿主	Rabbit
经测试应用	**适用于:** WB, IHC-FoFr, IHC-Fr, ICC/IF, IHC-P
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide conjugated to KLH derived from within residues 700 to the C-terminus of Human FOXP2. **参阅Abcam的专有抗源政策** (Peptide available as ab16278.)
阳性对照	This antibody gave a positive signal in HEK293 Whole Cell Lysate; ICC/IF: HepG2 cells; IHC-P: FFPE mouse foetal E17 brain tissue sections.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
纯度	Immunogen affinity purified
克隆	**多克隆**
同种型	IgG

应用

Our Abpromise guarantee covers the use of **ab16046** in the following tested applications.

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

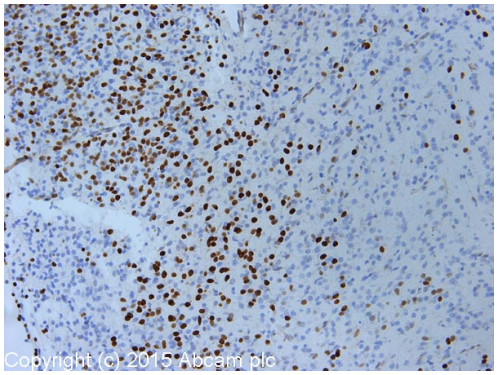
应用	Ab评论	说明
WB	★★★★★	1/1000. Can be blocked with Human FOXP2 peptide (ab16278). (see abreview)
IHC-FoFr		Use at an assay dependent concentration. PubMed: 19490899

应用	Ab评论	说明
IHC-Fr	★★★★★	Use at an assay dependent concentration.
ICC/IF	★★★★★	Use at an assay dependent concentration.
IHC-P	★★★★☆	1/50 - 1/2500. PubMed: 19136970

靶标

功能	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.
组织特异性	Isoform 1 and isoform 6 are expressed in adult and fetal brain, caudate nucleus and lung.
疾病相关	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).
序列相似性	Contains 1 C2H2-type zinc finger. Contains 1 fork-head DNA-binding domain.
发展阶段	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.
结构域	The leucine-zipper is required for dimerization and transcriptional repression.
细胞定位	Nucleus.

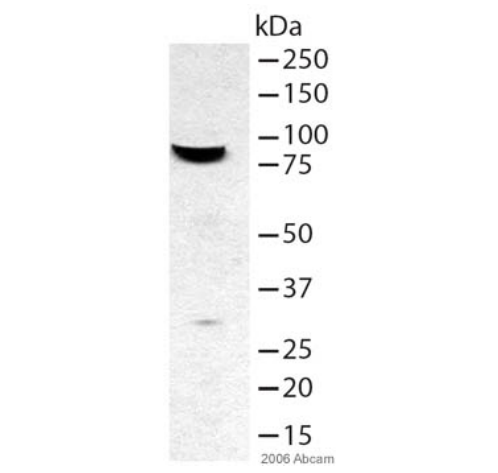
图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXP2 antibody (ab16046)

IHC image of FOXP2 staining in mouse e17 foetal brain formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab16046, 0.1µg/ml, for 15 mins at room temperature. A goat anti-rabbit biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

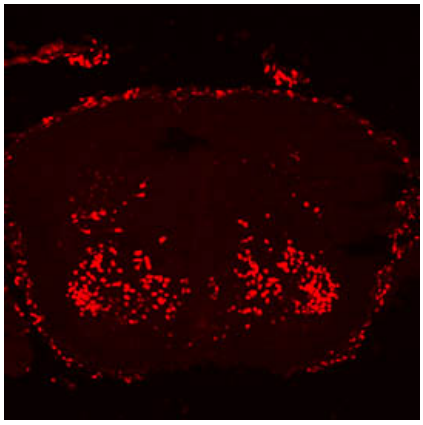
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-FOXP2 antibody (ab16046)

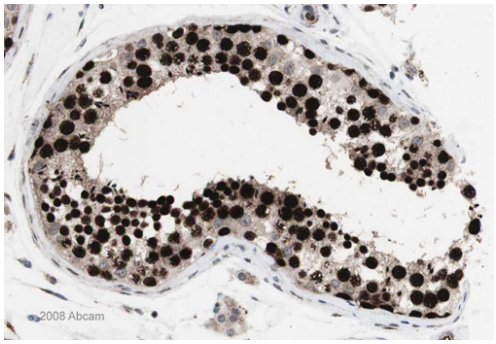
This image is courtesy of an anonymous Abreview

ab16046 at 1/1000 detecting FOXP2 from human 293T cell lysate (whole cell) (60ug/lane) by Western Blot. An HRP conjugated goat anti-rabbit IgG was used as the secondary and ECL was used as the detection method (1 minute exposure).



Immunocytochemistry/ Immunofluorescence - Anti-FOXP2 antibody (ab16046)

Mouse spinal cord was fixed in paraformaldehyde, blocked in 1% BSA for 30 minutes then incubated with ab16046 at 1/8000 dilution for 18 hours. This image was submitted as part of a review by Jeremy Dasen.



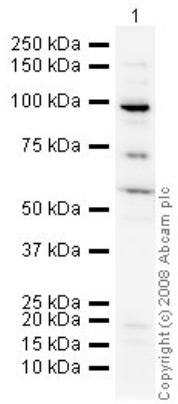
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXP2 antibody (ab16046)

Image courtesy of Human Protein Atlas

ab16046 staining FOXP2 in human testis. Paraffin embedded human testis tissue was incubated with ab16046 (1/600 dilution) for 30 mins at room temperature. Antigen retrieval was performed by heat induction in citrate buffer pH 6.

ab16046 was tested in a tissue microarray (TMA) containing a wide range of normal and cancer tissues as well as a cell microarray consisting of a range of commonly used, well characterised human cell lines.

Further results for this antibody can be found at www.proteinatlas.org



Western blot - Anti-FOXP2 antibody (ab16046)

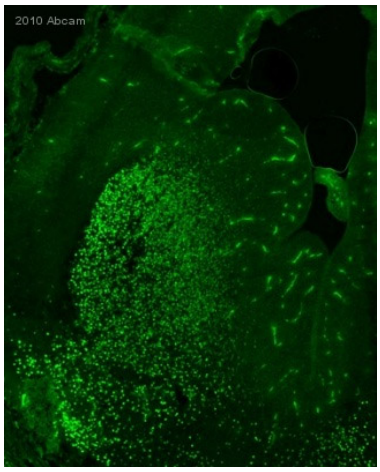
Anti-FOXP2 antibody (ab16046) at 1 µg/ml + HEK293 (Human embryonic kidney cell line) Whole Cell Lysate at 10 µg

Secondary

Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

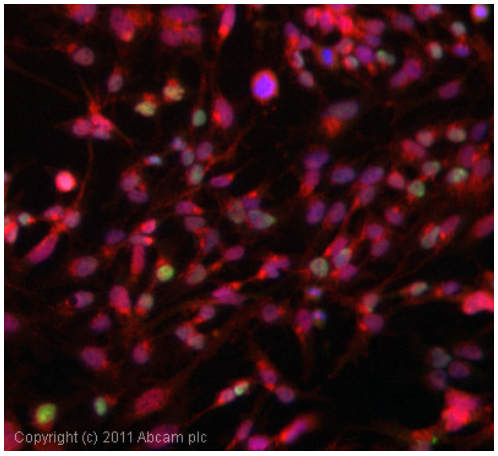
Observed band size: 90 kDa
Additional bands at: 56 kDa, 70 kDa. We are unsure as to the identity of these extra bands.



Immunohistochemistry (Frozen sections) - Anti-FOXP2 antibody (ab16046)

This image is courtesy of an anonymous Abreview

ab16046 staining FOXP2 in mouse brain tissue sections by IHC-Fr (Frozen sections). Tissue samples were fixed with paraformaldehyde, permeabilized by 0.4% Triton X and blocked with 10% serum for 1 hour at 22°C. The sample was incubated with primary antibody (1/8000) at 4°C for 16 hours. An Alexa Fluor®488-conjugated Goat polyclonal to mouse IgG (1/1000) was used as secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-FOXP2 antibody (ab16046)

ICC/IF image of ab16046 stained HepG2 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab16046, 1µg/ml) overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti-rabbit IgG - H&L, pre-adsorbed (ab96899) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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