

FOXG1 Antibody

Catalog # ASC11891

Specification

FOXG1 Antibody - Product Information

Application WB, IF, E
Primary Accession P55316

Other Accession
Reactivity
Host
Rabbit

Clonality Polyclonal Isotype IgG

Calculated MW Predicted: 54 kDa

Observed: 54 kDa KDa

Application Notes FOXG1 antibody can be used for detection of FOXG1 by Western blot at 1 - 2 μg/ml.

of FOXG1 by Western blot at 1 - 2 μ g/ml. For immunofluorescence start at 20 μ g/mL.

FOXG1 Antibody - Additional Information

Gene ID 2290

Target/Specificity

FOXG1; FOXG1 antibody is human, mouse and rat reactive.

Reconstitution & Storage

Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

Precautions

FOXG1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FOXG1 Antibody - Protein Information

Name FOXG1

Function

Transcription repression factor which plays an important role in the establishment of the regional subdivision of the developing brain and in the development of the telencephalon.

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00089, ECO:0000269|PubMed:21280142}

Tissue Location

Expression is restricted to the neurons of the developing telencephalon.

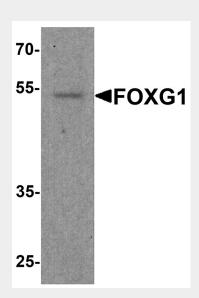


FOXG1 Antibody - Protocols

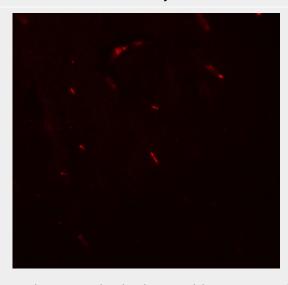
Provided below are standard protocols that you may find useful for product applications.

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

FOXG1 Antibody - Images



Western blot analysis of FOXG1 in rat brain tissue lysate with FOXG1 antibody at 1 µg/ml.

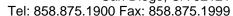


Immunofluorescence of FOXG1 in mouse brain tissue with FOXG1 antibody at 20 μg/ml.

FOXG1 Antibody - Background

FOXG1 belongs to the forkhead family of transcription factors which is characterized by a distinct forkhead domain and plays an important role in the development of the brain and telencephalon







(1). It is essential for the proliferation of progenitor cells in the cerebral cortex and influences regional patterning in the mammalian telencephalon (2,3). Expression is restricted to the neurons of the developing telencephalon (3). The loss of FOXG1 results in an accelerated rate of neuronal differentiation and the shortening of the neurogenetic period in the embryonic cerebral cortex (2,4).

FOXG1 Antibody - References

Murphy DB, Wiese S, Burfeind P, et al. Human brain factor 1, a new member of the fork head gene family. Genomics 1994; 21:551-7.

Kumamoto T, Toma K, Gunadi, et al. Foxg1 coordinates the switch from nonradially to radially migrating glutamatergic subtypes in the neocortex through spatiotemporal repression. Cell Rep. 2013; 3:931-45.

Miyoshi G and Fishell G. Dynamic FoxG1 expression coordinates the integration of multipolar pyramidal neuron precursors into the cortical plate. Neuron 2012;74:1045-58.

Mencarelli MA, Spanhol-Rosseto A, Artuso R, et al. Novel FOXG1 mutations associated with the congenital variant of Rett syndrome. J. Med. Genet. 2010; 47:49-53.