10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FOXG1 Antibody
Catalog # ASC11891

Specification

FOXG1 Antibody - Product Information

Application	**WB, IF**
Primary Accession	P55316
Other Accession	NP_005240, 32307177
Reactivity	**Human, Mouse, Rat**
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. For immunofluorescence start at 20 µg/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.

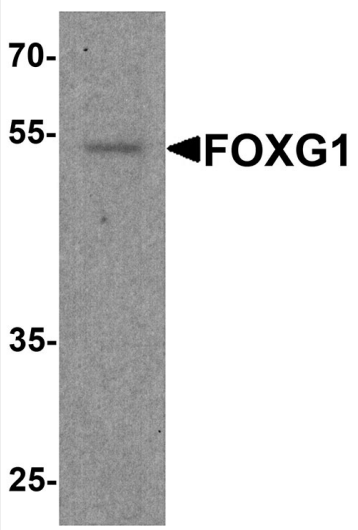
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FOXG1 Antibody - Protocols

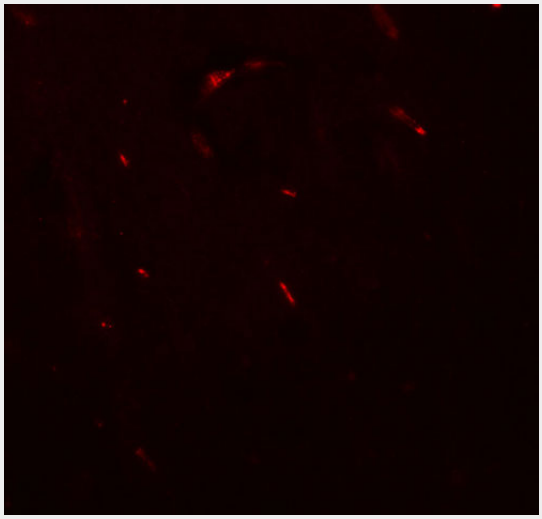
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- 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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

(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.