

# FOXG1 Antibody

Catalog # ASC11891

## **Product Information**

**Application** WB, IF, E **Primary Accession** P55316

Other Accession NP\_005240, 32307177
Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 52352
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

**Application Notes** FOXG1 antibody can be used for detection of FOXG1 by Western blot at 1 - 2

□g/ml. For immunofluorescence start at 20 □g/mL.

## **Additional Information**

**Gene ID** 2290

Other Names Forkhead box protein G1, Brain factor 1, BF-1, BF1, Brain factor 2, BF-2, BF2,

hBF-2, Forkhead box protein G1A, Forkhead box protein G1B, Forkhead box protein G1C, Forkhead-related protein FKHL1, HFK1, Forkhead-related protein

FKHL2, HFK2, Forkhead-related protein FKHL3, HFK3, FOXG1

**Target/Specificity** FOXG1; FOXG1 antibody is human, mouse and rat reactive.

**Reconstitution & Storage** FOXG1 antibody can be stored at 4°C for three months and -20°C, stable for

up to one year.

**Precautions** FOXG1 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

#### **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.

# **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).

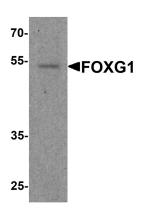
### References

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.

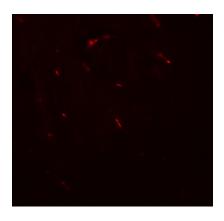
Kumamoto T, Toma K, Gunadi, et al. Foxg1 coordinates the switch from nonradially to radially migrating glutamatergic subtypes in the neocortex through spatiotemporal repression. Cell Rep. 2013; 3:931-45. Miyoshi G and Fishell G. Dynamic FoxG1 expression coordinates the integration of multipolar pyramidal 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.

# **Images**



Western blot analysis of FOXG1 in rat brain tissue lysate with FOXG1 antibody at 1  $\mu$ g/ml.



Immunofluorescence of FOXG1 in mouse brain tissue with FOXG1 antibody at 20  $\mu$ g/ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.