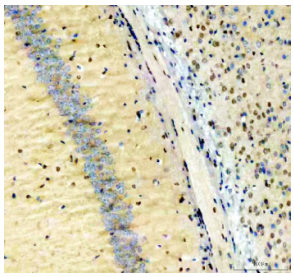
NFIA Antibody / Nuclear factor 1 A-type (R32548)

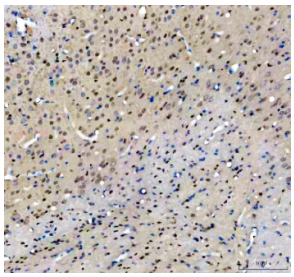
Catalog No.	Formulation	Size
R32548	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

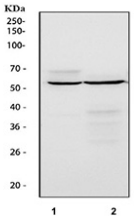
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q12857
Localization	Nuclear
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This NFIA antibody is available for research use only.



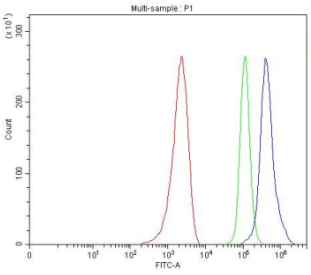
IHC staining of FFPE mouse brain tissue with NFIA antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat brain tissue with NFIA antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human MCF7 and 2) rat liver tissue lyste with NFIA antibody. Predicted molecular weight ~56 kDa (unmodified), 60-70 kDa (phosphorylated).



Flow cytometry testing of fixed and permeabilized human MCF7 cells with NFIA antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=NFIA antibody.

Description

NFIA (Nuclear factor 1 A-type) is a transcription factor belonging to the nuclear factor I family, which binds specific DNA sequences to regulate gene expression during development and differentiation. NFIA functions as both a transcriptional activator and repressor and is involved in diverse biological processes, including glial cell development, organogenesis, and regulation of metabolic genes.

NFIA is highly expressed in the developing central nervous system, particularly in astrocyte and oligodendrocyte lineages, and it plays a pivotal role in the transition of neural stem cells toward glial fates. It also contributes to transcriptional regulation in other tissues, including kidney, lung, and liver, making it a widely studied marker in developmental biology and gene regulatory network research.

The **NFIA antibody** is a valuable tool for detecting endogenous NFIA in applications such as western blot, immunohistochemistry, and immunofluorescence. Researchers use the NFIA antibody from NSJ Bioreagents to assess protein expression, determine subcellular localization, and study NFIAÃ¢Â€Â™s role in lineage specification and transcriptional regulation. With high specificity and consistent performance, the NFIA antibody supports detailed investigations into neurodevelopment, transcription factor function, and cellular differentiation pathways.

Application Notes

Differences in protocols and secondary/substrate sensitivity may require the NFIA antibody to be titrated for optimal performance.

Immunogen

Amino acids 180-224 (AYFVHAADSSQSESPSQPSDADIKDQPENGHLGFQDSFVTSGVFS) from the human protein were used as the immunogen for the NFIA antibody.

Storage

After reconstitution, the NFIA antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.