

ARGFX (N-18): sc-102314

BACKGROUND

ARGFX (arginine-fifty homeobox) is a 315 amino acid protein that localizes to the nucleus and contains one homeobox DNA-binding domain. Expressed in testis and in undifferentiated embryonic cells, ARGFX belongs to the paired homeobox family and is thought to function as a transcription factor, possibly playing a role in early embryonic development. The gene encoding ARGFX maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

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- Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
- Yue, Y., et al. 2005. Genomic structure and paralogous regions of the inversion breakpoint occurring between human chromosome 3p12.3 and orangutan chromosome 2. *Cytogenet. Genome Res.* 108: 98-105.
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- Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.
- Booth, H.A., et al. 2007. Annotation, nomenclature and evolution of four novel homeobox genes expressed in the human germ line. *Gene* 387: 7-14.

CHROMOSOMAL LOCATION

Genetic locus: ARGFX (human) mapping to 3q13.33.

SOURCE

ARGFX (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ARGFX of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-102314 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-102314 X, 100 µg/0.1 ml.

APPLICATIONS

ARGFX (N-18) is recommended for detection of ARGFX of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ARGFX siRNA (h): sc-78106, ARGFX shRNA Plasmid (h): sc-78106-SH and ARGFX shRNA (h) Lentiviral Particles: sc-78106-V.

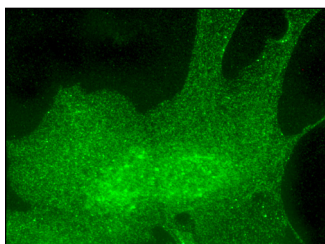
ARGFX (N-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ARGFX: 36 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ARGFX (N-18): sc-102314. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear and cytoplasmic localization.

RESEARCH USE

For research use only, not for use in diagnostic procedures.