

FOXN4 (G-20): sc-66772

BACKGROUND

The human gene FOXN4 encodes for a 476 amino acid nuclear protein designated FOXN4. FOXN4 cooperates with key retinogenic factors to mediate the multipotent differentiation of retinal progenitors and is believed to regulate neuronal subtype diversification. FOXN4 is expressed in a subset of mitotic progenitors during retinogenesis. As such, FOXN4 controls the formation of amacrine and horizontal cells by activating the expression of the retinogenic factors MATH-3, Neuro D and PROX1. During spinal neurogenesis, the p2 progenitor domain gives rise to two intermingled distinct subtypes of interneurons, termed V2a and V2b. FOXN4 is coexpressed with the bHLH factor ASH1 (Mash1) in a subset of p2 progenitors. Functionality of FOXN4 affects ASH1 expression and regulates interneuronal formation accordingly. Over-expression of FOXN4 alone in spinal neural progenitors promotes the V2a fate at the expense of the V2b fate, whereas ASH1 suppresses both the V2a and V2b fates.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FOXN4 (human) mapping to 12q24.11; Foxn4 (mouse) mapping to 5 F.

SOURCE

FOXN4 (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FOXN4 of rat origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-66772 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-66772 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FOXN4 (G-20) is recommended for detection of FOXN4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

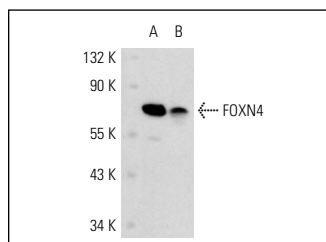
Suitable for use as control antibody for FOXN4 siRNA (h): sc-62343, FOXN4 siRNA (m): sc-62344, FOXN4 shRNA Plasmid (h): sc-62343-SH, FOXN4 shRNA Plasmid (m): sc-62344-SH, FOXN4 shRNA (h) Lentiviral Particles: sc-62343-V and FOXN4 shRNA (m) Lentiviral Particles: sc-62344-V.

FOXN4 (G-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of FOXN4: 55 kDa.

Positive Controls: Y79 nuclear extract: sc-2126 or NIH/3T3 nuclear extract: sc-2138.

DATA



FOXN4 (G-20): sc-66772. Western blot analysis of FOXN4 expression in Y79 (A) and NIH/3T3 (B) nuclear extracts.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **FOXN4 (H-2): sc-390456** or **FOXN4 (G-1): sc-377166**, our highly recommended monoclonal alternatives to FOXN4 (G-20).