**BACKGROUND**

Germ cell nuclear factor (GCNF) is an orphan member of the nuclear receptor gene superfamily that influences neurogenesis and germ cell development. GCNF can homodimerize and bind DNA. GCNF regulates paracrine interaction between the oocyte and somatic cells by regulating the expression of BMP-15 and GDF-9, to affect female fertility. GCNF is present in spermatozoids and round spermatids of adult male mouse testis; northern blot and ribonuclease protection assays have shown GCNF is predominant in the testis. The gene expresses three alternatively spliced transcript variants.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: NR6A1 (human) mapping to 9q33.3; Nr6a1 (mouse) mapping to 2B.

**SOURCE**

GCNF (B-2) is a mouse monoclonal antibody raised against amino acids 181-480 mapping at the C-terminus of GCNF of human origin.

**PRODUCT**

Each vial contains 200 µg IgG_{κ} kappa light chain 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-271733 X, 200 µg/0.1 ml.

GCNF (B-2) is available conjugated to agarose (sc-271733 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271733 HRP), 200 µg/ml, for WB, IHC (P) and ELISA; to either phycoerythrin (sc-271733 PE), fluorescein (sc-271733 FITC), Alexa Fluor® 488 (sc-271733 AF488), Alexa Fluor® 546 (sc-271733 AF546), Alexa Fluor® 594 (sc-271733 AF594) or Alexa Fluor® 647 (sc-271733 AF647), 200 µg/ml, for WB (RGB), IF, IHC (P) and FCM; and to either Alexa Fluor® 880 (sc-271733 AF880) or Alexa Fluor® 790 (sc-271733 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

GCNF (B-2) is recommended for detection of GCNF of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

GCNF (B-2) is also recommended for detection of GCNF in additional species, including equine, canine, bovine and porcine.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG \(κ\)BP-HRP : sc-516102 or m-IgG \(κ\)BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

3) Immunofluorescence: use m-IgG \(κ\)BP-FITC: sc-516140 or m-IgG \(κ\)BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

*Figure showing Western blot analysis of GCNF expression in HEK290 (A), K-562 (B) and F9 (C) whole cell lysates.*

**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.