# GNL2 (P-15): sc-55690



The Power to Question

#### **BACKGROUND**

GNL2 (also known as autoantigen NGP-1, NOG2 or nucleolar GTP-binding protein 2) is a nucleolar guanasine-triphosphate binding protein that is ubiquitously expressed at low levels in almost all tissues. GNL2 is involved in the crucial process of trafficking proteins out of the nucleus. Specifically, it is a GTPase that interacts with the 60s preribosomal subunit in the nucleus and facilitates export of the subunit into the cytoplasm. GTPases are responsible for the hydrolysis of GTP by way of a protein region dubbed the G domain. GTPases are often involved in the translocating proteins through membranes gleaning energy for the activity by hydrolizing GTP. GNL2 shares G domain homology and some functionality with nucleostemin (GNL3), another nuclear GTPase. Highest expression of GNL2 is found in testis.

# CHROMOSOMAL LOCATION

Genetic locus: GNL2 (human) mapping to 1p34.3; Gnl2 (mouse) mapping to 4 D2.2.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55690 P, ( $100 \mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### SOURCE

GNL2 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GNL2 of human origin.

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### **APPLICATIONS**

GNL2 (P-15) is recommended for detection of GNL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

GNL2 (P-15) is also recommended for detection of GNL2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for GNL2 siRNA (h): sc-62685, GNL2 siRNA (m): sc-62686, GNL2 shRNA Plasmid (h): sc-62685-SH, GNL2 shRNA Plasmid (m): sc-62686-SH, GNL2 shRNA (h) Lentiviral Particles: sc-62685-V and GNL2 shRNA (m) Lentiviral Particles: sc-62686-V.

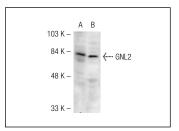
Molecular Weight of GNL2: 84 kDa.

Positive Controls: Ramos nuclear extract: sc-2153, Jurkat nuclear extract: sc-2132 or Jurkat whole cell lysate: sc-2204.

### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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**



GNL2 (P-15): sc-55690. Western blot analysis of GNL2 expression in Ramos (A) and Jurkat (B) nuclear extracts.

# **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.



Try **GNL2 (B-8):** sc-514050 or **GNL2 (B-10):** sc-376732, our highly recommended monoclonal alternatives to GNL2 (P-15).

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