# MYG1 (D-16): sc-168669



The Power to Question

#### **BACKGROUND**

MYG1 (Melanocyte proliferating gene 1), also known as C12orf10, Gamm1, MYG, MST024 or MSTP024, is a 376 amino acid nucleo-mitochondrial protein belonging to the UPF0160 (MYG1) family. MYG1 is encoded by a gene that maps to human chromosome 12q13.13 and is ubiquitously expressed in simple as well as complex eukaryotes, with highest levels in testis. Considered to have a metal-dependent protein hydrolase (UPF0160) domain, MYG1 exhibits a mitochondrial targeting signal in the N-terminal region and a Pat7-type nuclear localization signal in the region between amino acids 33-39. Although MYG1 displays differential patterns and levels of expression during embryonic development, expression in normal adult tissues is stable, suggesting MYG1 involvement in early developmental processes and in adult stress/illness conditions. Elevation of MYG1 expression may be also associated with vitiligo susceptibility.

## CHROMOSOMAL LOCATION

Genetic locus: C12orf10 (human) mapping to 12q13.13; Myg1 (mouse) mapping to 15 F3.

## **SOURCE**

MYG1 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MYG1 of human origin.

## **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-168669 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

Store at  $4^{\circ}$  C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **APPLICATIONS**

MYG1 (D-16) is recommended for detection of MYG1 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).

MYG1 (D-16) is also recommended for detection of MYG1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MYG1 siRNA (h): sc-96239, MYG1 siRNA (m): sc-149737, MYG1 shRNA Plasmid (h): sc-96239-SH, MYG1 shRNA Plasmid (m): sc-149737-SH, MYG1 shRNA (h) Lentiviral Particles: sc-96239-V and MYG1 shRNA (m) Lentiviral Particles: sc-149737-V.

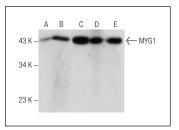
Molecular Weight of MYG1: 42 kDa.

Positive Controls: MYG1 (h): 293T Lysate: sc-113903, mouse testis tissue extract or NTERA-2 cl.D1 whole cell lysate.

#### **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**



MYG1 (D-16): sc-168669. Western blot analysis of MYG1 expression in non-transfected 293T: sc-117752 (A), human MYG1 transfected 293T: sc-113903 (B) and NTERA-2 cl.D1 (C) whole cell lysates and human testis (D) and mouse testis (E) tissue 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 **MYG1 (F-5):** sc-393331, our highly recommended monoclonal alternative to MYG1 (D-16).

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