# SANTA CRUZ BIOTECHNOLOGY, INC.

# GBP4 (E-16): sc-242889



#### BACKGROUND

GBP4 (guanylate binding protein 4), also known as Mpa2, is a 640 amino acid protein that localizes to the cytoplasm and belongs to the guanylate binding protein (GBP) family. Like other GBP proteins, GBP4 contains a conserved N-terminal GTP-binding domain and functions to bind and hydrolyze GTP, GDP and GMP, possibly playing a role in erythroid differentiation. The gene encoding GBP4 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

# REFERENCES

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#### CHROMOSOMAL LOCATION

Genetic locus: GBP4 (human) mapping to 1p22.2.

#### SOURCE

GBP4 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GBP4 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.

## 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-242889 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

GBP4 (E-16) is recommended for detection of GBP4 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); non cross-reactive with other GBP family members.

Suitable for use as control antibody for GBP4 siRNA (h): sc-88062, GBP4 shRNA Plasmid (h): sc-88062-SH and GBP4 shRNA (h) Lentiviral Particles: sc-88062-V.

Molecular Weight of GBP4: 71 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) Immunofluo-rescence: 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.

# **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 Satisfation Guaranteed

Try **GBP1-5 (G-12): sc-166960**, our highly recommended monoclonal alternative to GBP4 (E-16).