

# GBP4 (K-23): sc-133608

## 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 (K-23) is an affinity purified rabbit polyclonal antibody raised against synthetic GBP4 peptide of human origin.

## PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

GBP4 (K-23) is recommended for detection of GBP4 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **GBP1-5 (G-12): sc-166960**, our highly recommended monoclonal alternative to GBP4 (K-23).