

Maltase-glucoamylase (K-15): sc-70083

BACKGROUND

Maltase-glucoamylase, also known as MGAM, MG or MGA, is a 1,857 amino acid multi-pass membrane protein that localizes to the apical cell membrane and contains 2 P-type domains. Expressed in kidney, small intestine and granulocytes, Maltase-glucoamylase exists as a monomer that is thought to participate in an alternate pathway of starch digestion, specifically when luminal α -amylase activity is reduced because of immaturity or malnutrition. Maltase-glucoamylase is subject to posttranslational N- and O-glycosylation, as well as sulfation. The gene encoding Maltase-glucoamylase maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

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CHROMOSOMAL LOCATION

Genetic locus: MGAM (human) mapping to 7q34; Mgam (mouse) mapping to 6 B1.

SOURCE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-70083 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Maltase-glucoamylase (K-15) is recommended for detection of Maltase-glucoamylase of mouse, rat and 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).

Maltase-glucoamylase (K-15) is also recommended for detection of Maltase-glucoamylase in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Maltase-glucoamylase siRNA (h): sc-75740, Maltase-glucoamylase siRNA (m): sc-75741, Maltase-glucoamylase shRNA Plasmid (h): sc-75740-SH, Maltase-glucoamylase shRNA Plasmid (m): sc-75741-SH, Maltase-glucoamylase shRNA (h) Lentiviral Particles: sc-75740-V and Maltase-glucoamylase shRNA (m) Lentiviral Particles: sc-75741-V.

Molecular Weight of unglycosylated Maltase-glucoamylase: 210 kDa.

Molecular Weight of glycosylated Maltase-glucoamylase: 285/335 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) 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.

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.