SANTA CRUZ BIOTECHNOLOGY, INC.

GGH (T-20): sc-69277

BACKGROUND

GGH (γ-glutamyl hydrolase), also known as GH or γ-glu-X carboxypeptidase, is a 318 amino acid protein that is secreted into the extracellular space and is also localized to both the lysosome and the melanosome. Functioning as a hydrolase, GGH contains one γ-glutamyl hydrolase domain through which it catalyzes the hydrolysis of polyglutamate sidechains from pteroylpolyglutamates, specifically hydrolyzing γ-glutamyl bonds. Via its catalytic activity, GGH may play a role in the bioavailability and metabolic activity of pteroylpolyglutamates. Polymorphisms in the gene encoding GGH are associated with rheumatoid arthritis, inflammatory bowel disease and various cancers. The gene encoding GGH maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

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CHROMOSOMAL LOCATION

Genetic locus: GGH (human) mapping to 8q12.3; Ggh (mouse) mapping to 4 A3.

SOURCE

GGH (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GGH of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-69277 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GGH (T-20) is recommended for detection of GGH 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).

GGH (T-20) is also recommended for detection of GGH in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GGH siRNA (h): sc-75127, GGH siRNA (m): sc-75128, GGH shRNA Plasmid (h): sc-75127-SH, GGH shRNA Plasmid (m): sc-75128-SH, GGH shRNA (h) Lentiviral Particles: sc-75127-V and GGH shRNA (m) Lentiviral Particles: sc-75128-V.

Molecular Weight of GGH: 37 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.