

Product Information

Anti-GUSB (C-terminal)

produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200336**

Product Description

Anti-GUSB (C-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to a sequence at the C-terminal region of human GUSB (GeneID: **2990**), conjugated to KLH. The corresponding sequence is identical in mouse and differs by a single amino acid in rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-GUSB (C-terminal) recognizes human and rat GUSB. The antibody may be used in various immunochemical techniques including immunoblotting (78 kDa) and immunohistochemistry. Detection of the GUSB band by immunoblotting is specifically inhibited by the immunizing peptide.

GUSB is a hydrolase that degrades glycosaminoglycans (GAGs), including heparan sulfate, dermatan sulfate, and chondroitin-4,6-sulfate. The enzyme forms a homotetramer that is localized to the lysosome. GUSB depletion causes only partial degradation of GAGs, which accumulate in the lysosomes of many tissues, leading to cellular and organ dysfunction. Mutations in this gene result in mucopolysaccharidosis type VII. There are many pseudogenes of this locus in the human genome.¹⁻³

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 2-4 µg/mL is recommended using whole extracts of human HepG2 cells.

Immunohistochemistry: a working concentration of 10-20 µg/mL is recommended using biotin / ExtrAvidin®-Peroxidase staining of heat-retrieved formalin-fixed, paraffin-embedded rat liver sections.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Tomatsu, S., et al., *Hum. Mutat.*, **30**, 511-519 (2009).
2. Oshima, A., et al., *Proc. Natl. Acad. Sci. USA*, **84**, 685-689 (1987).
3. Jain, S., et al., *Nat. Struct. Biol.*, **3**, 375-381 (1996).

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