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Product Information

Anti-Glutathione-S-Transferase (GST) antibody, Mouse monoclonal
clone GST-2, purified from hybridoma cell culture

Product Number **SAB4200692**

Product Description

Anti-Glutathione-S-Transferase (GST) antibody, Mouse monoclonal (mouse IgG2b isotype) is derived from the hybridoma GST-2 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a purified recombinant GST fusion protein. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The antibody is purified from culture supernatant of hybridoma cells.

Monoclonal Anti-Glutathione-S-Transferase (GST) recognizes native as well as denatured-reduced forms of GST and GST fusion proteins. The product may be used in several immunochemical techniques including Immunoblotting,[1] Immunoprecipitation,[2] dot blotting,[3] autoradiography,[4] Immunofluorescence[5]and ELISA.[6]

Glutathione-S-Transferase is a 26 kDa protein found in eukaryotic cells which its primary function is to catalyze the conjugation of electrophilic substrates to reduced form of glutathione (GSH). Genetic engineering used Glutathione-S-Transferase (from parasitic helminth *Schistosoma japonicum*) to create the GST gene fusion system for production of GST-labeled recombinant proteins. These proteins can be easily detected, separated and purified using a GST-tag via its high affinity for glutathione.[1] Anti-Glutathione-S-Transferase antibody may be used to detect GST-labeled proteins, including antibodies and peptides. Labeled compounds and corresponding conjugated antibodies can be used in a variety of immunological studies, vaccine production, high-throughput proteomic studies for directed immobilization in protein microarrays and Surface Plasmon Resonance (SPR).[7-9] GST-fusion proteins were successfully demonstrated in structure-function studies involving protein-protein and DNA-protein interactions via GST pull down assays.[10-11] In addition, the use of GST fusion proteins has been successful in both NMR and crystallography structure determinations.[12-13]

Reagent

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

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 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 antibody concentration of 0.5 μg/ml recognizes 0.2-0.5 μg/lane recombinant GST protein from *Escherichia coli* (Product No. G5663).

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

References

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