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Product Information

Anti-GW182
produced in rabbit, affinity isolated antibody

Product Number **G5922**

Product Description

Anti-GW182 is produced in rabbit using as immunogen a synthetic peptide corresponding to a fragment of mouse GW182 (GeneID: 233833) conjugated to KLH. The corresponding sequence is identical in rat and differs by one amino acid in human. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-GW182 recognizes human GW182. The antibody may be used by immunofluorescence. Detection of the GW182 protein by immunofluorescence is specifically inhibited by the immunizing peptide.

GW182 is a phosphorylated cytoplasmic autoantigen that contains multiple glycine-tryptophan (GW) repeats and a single RNA recognition motif.[1] GW182 associates with messenger RNAs and Argonaute proteins in cytoplasmic bodies known as GW-bodies (GWBs) or P-bodies that are involved in mRNA degradation, storage, and translational repression. GW182 functions in post-transcriptional gene silencing, also known as RNA interference (RNAi), through the microRNA pathway.[1-4] GW182 is a critical component of GWBs. Inhibiting expression of this gene disrupts GWBs and impairs RNAi and microRNA-induced gene silencing.[5-7] Anti-GW182 may be used as a GWBs marker.

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

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

Store at –20 °C. For continuous use, the product may be stored at 2–8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunofluorescence: a working antibody concentration of 2.5–5.0 μg/mL is recommended using human epithelial HEp-2 cells.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

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VS,ST,TD,KAA,PHC,MAM 02/19-1