

Product Information

Anti-GEP100

produced in rabbit, affinity isolated antibody

Product Number **G4798**

Product Description

Anti-GEP100 is produced in rabbit using as the immunogen a synthetic peptide corresponding to a fragment of human GEP100 (GeneID: 9922), conjugated to KLH. The corresponding sequence is identical in mouse and rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-GEP100 recognizes human and mouse GEP100. The antibody may be used in several immunochemical techniques including immunoblotting (~100 kDa). Detection of the GEP100 band by immunoblotting is specifically inhibited by the immunizing peptide.

GEP100 (also called BRAG2) is a guanine nucleotide-exchanging factor (GEF) for Arf6. GEP100 induces breast cancer invasion and metastasis by specifically activating Arf6 in response to EGF stimulation. Overexpression of GEP100 together with Arf6 causes non-invasive MCF7 cells to become highly invasive. GEP100 contains an ARF-activating Sec7 domain, a pleckstrin homology (PH) domain and an IQ-like motif. Upon EGF stimulation, GEP100 associates with EGFR by the direct binding of its PH domain to two phosphorylated tyrosines (Tyr^{1068/1086}) in EGFR. GEP100 also interacts with α -catenin, which is involved in the regulation of cell adhesion, actin cytoskeleton remodeling, and cell migration.¹⁻⁶

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 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 1-2 μ g/mL is recommended using whole extracts of human MDA-MB-231 and mouse 4T1 cells.

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

References

1. Someya, A. et al., *Proc. Natl. Acad. Sci. USA*, **98**, 2413-2418 (2001).
2. Hiroi, T. et al., *Proc. Natl. Acad. Sci. USA*, **103**, 10672-10677 (2006).
3. Dunphy, J.L. et al., *Curr. Biol.*, **16**, 315-320 (2006).
4. Morishige, M. et al., *Nature Cell Biol.*, **10**, 85-92 (2008).
5. Valderrama, F., and Ridley, A.J., *Nature Cell Biol.*, **10**, 16-18 (2008).
6. Sabe, H. et al., *Traffic*, **10**, 982-993 (2009).

VS,ST,TD,KAA,PHC,MAM 04/19-1