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Product Information

Monoclonal Anti-KISS1, clone KISS-54
produced in mouse, purified immunoglobulin

Catalog Number **SAB4200418**

Product Description

Monoclonal Anti-KISS1 (mouse IgG1 isotype) is derived from the hybridoma KISS-54 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a peptide corresponding to a sequence at the C-terminus of human KISS1 (GeneID: 3814), conjugated to KLH. The isotype is determined by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti- KISS1 recognizes human, bovine and canine KISS1. The antibody may be used in various immunochemical techniques including, immunoblotting (~ 26 kDa) and immunofluorescence. Staining of the KISS1 band in immunoblotting is specifically inhibited by the immunizing protein.

KISS1 is the G-protein coupled receptor ligand for GPR54.[1] It was originally identified as a human metastasis supressor gene that has the ability to supress melanoma and breast cancer metastasis, without affecting tumorigenicity. It was suggested to regulate events downstream of cell-matrix adhesion in mechanisms involving cytoskeletal reorganization.[2] Kiss1 gene is expressed in both central and peripheral tissues.[3] It was shown to be involved in initiating secretion of gonadotropin-releasing-hormone (GnRH) at puberty, and was also found to play a critical role in the regulation of the hypothalamic–pituitary–gonadal axis, thus in turn influencing fertility and reproduction.[4] Having such roles, Kiss1 has been suggested as a possible treatment for reproductive disorders as well as clinically treatment of metastases.[4-5]

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 extended storage, freeze at –20 ^{0}C in working aliquots. 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 dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 1.0-2.0 µg/mL is recommended using extracts of MDBK cells.

Immunofluorescence: a working concentration of 0.25-0.5 µg/mL is recommended using MDBK cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Muir, A.I., et al., *J. Biol. Chem*., **276**, 28969-28975 (2001).
2. Lee, J.H., and Welch, D.R., *Cancer Res*., **57**, 2384-2387 (1997).
3. Li, D., et al., *Peptides*, **30,** 130-138 (2009).
4. Hameed, S., et al., *J. Endocrinol*., **208**, 97–105 (2011).
5. Beck, B.H., and Welch, D.R., *Eur. J. Cancer*, **46**, 1283-1289 (2010).

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