

Product Information

Anti-DPP4/CD26 Antibody

Mouse Monoclonal, Clone A6H, Purified from Hybridoma Cell Culture

SAB4200230

Product Description

Monoclonal Anti-DPP4/CD26 (mouse IgG1 isotype) is derived from the hybridoma A6H produced by the fusion of mouse myeloma (P3X63-Ag8.653) cells and splenocytes from BALB/c mice immunized with human fetal homogenates.¹ The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents (Cat. No. ISO2). The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-DPP4/CD26 recognizes human DPP4/CD26. The product may be used in several immunochemical techniques including ELISA, immunocytochemistry, immunohistochemistry and flow cytometry.^{1,2}

Dipeptidyl-peptidases are a subclass of serine proteases with nine known members. DPP4 belongs to the S9B protein family that cleaves X-proline dipeptides from the N-terminus of polypeptides, such as chemokines, neuropeptides, and peptide hormones. The enzyme is a type II transmembrane glycoprotein, expressed on the surface of many cell types, whose physiological functions are largely unknown. It has been implicated in the regulation of the biological activity of hormones and chemokines, such as glucagon-like peptide-1 and glucose-dependent insulinotropic polypeptide, and thus DPP4 inhibition offers a new potential therapeutic approach for type 2 diabetes mellitus as monotherapy and as adjunct therapy to other oral agents. The clinical use of presently available orally active inhibitors of DPP4, however, has been associated with side effects that have been in part attributed to the inhibition of related serine proteases, such as DPP8 and DPP9. It is noteworthy that DPP4/CD26 plays a key role in immune regulation as a T cell activation molecule and in immune-mediated disorders. The effects of DPP4 inhibition on the immune system have not been extensively investigated yet.^{3,4}

Reagents

The product is supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide.

Antibody concentration: ~ 4.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze at -20 °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

Immunofluorescence

A working antibody concentration of 20-40 µg/mL is recommended using methanol/acetone fixed HT-29 cells.

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

References

1. Vessella, R.L., et al., *Cancer Res.*, **45**: 6131-6139 (1985).
2. Hass, M., et al., *Hybridoma*, **20**: 231-236 (2001).
3. Matteucci, E. and Giampietro, O., *Curr. Med. Chem.*, **16**: 2943-2961 (2009).
4. Zettl, H., et al., *ChemMedChem.*, **5**: 179-185 (2010).

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SAB4200230dat Rev 08/21

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