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Product Information

Anti-hFBXW7 antibody, Mouse monoclonal clone FB407
purified from hybridoma cell culture

Product Number **F2055**

Product Description

Monoclonal Anti-hFBXW7 (mouse IgG2a isotype) is derived from the hybridoma FB407 produced by the fusion of mouse myeloma cells (NS1 cells) and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to amino-acids 238-250 of human hFBXW7 isoforms α, β, and γ (GeneID: 55294). The isotype is determined using a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2.

Monoclonal Anti-hFBXW7 recognizes human, mouse, and rat hFBXW7. The antibody recognizes human hFBXW7 β and γ isoforms. The antibody may be used in ELISA, immunoblotting (~60 kDa), and immunocytochemistry.

FBXW7 is an F-box protein that serves as a substrate recognition component of the ubiquitin ligase complex SCF (Skp-Cullin-F-box). There are three FBXW7 isoforms α, β, and γ, that share 10 out of 11 exons.[1-5] They differ in their subcellular localization that defines their substrate recognition. These proteins mediate recognition of phosphorylated targets including Cyclin E, Myc, c-Jun, and Notch, leading to their ubiquitination and degradation. Furthermore, they were found mutated in breast, endometrial, ovarian, and colon cancer, and their mutagenesis results in genomic instability. Similar to the inactivation mode of other known tumor suppressors, the SV40 large T antigen binds FBXW7 without detectible effects on its stability, and thus acts as an inhibitor of FBXW7 activity.[1-5]

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: ~2 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, 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 5-10 μg/mL is recommended using human A431 cells.

Immunocytochemistry: a working concentration of 10-20 μg/mL is recommended using human A431 or HeLa cells.

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

References

1. Welcker, M. et al., *Curr Biol.*, **14**, 1852-1857 (2004).
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3. Willmarth, N. et al., *Breast Can. Res*., **6**, R531-R539 (2004).
4. Rajagopalan, H. et al., *Nature*, **428**, 77-81 (2004).
5. Wlcker, M. et al., *J. Biol. Chem*., **280**, 7654-7658 (2005).

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