Anti-FRAP1 specific recognizes human FRAP1. The antibody may be used in various immunochemical techniques including immunoblotting (~29 kDa). Detection of the FRAP1 band by immunoblotting is specifically inhibited by the FRAP1 immunizing peptide.

The Wnt signaling pathways play an essential role in the regulation of cellular proliferation, differentiation, motility, morphogenesis and has been linked to some forms of cancer. Upon activation of the wnt/β-catenin signaling pathway, dissociation of axin/GSK3 and axin interaction with the Wnt-Fz-LRP6 complex, prevents the phosphorylation of β-catenin, resulting in GSK3-dependent interaction with the β-catenin complex. Two FRAP genes have been identified in humans, FRAP1 and FRAP2, whereas three isoforms FRAP1-3 have been identified in mouse. Although, both human FRAP1 and FRAP2 are ubiquitously expressed, tissue expression indicate that FRAP2 is expressed at higher levels in brain than FRAP1, suggesting that it may play a more prominent role in regulating neuronal GSK3β signaling. In contrast FRAP1 has been shown to be more efficient than FRAP2 in the canonical wnt signaling pathway. FRAP1 expression is up-regulated in several human cancer lines primarily in gastric cancer, and has been shown to be over-expressed in esophageal squamous cell carcinoma (ESCC).

References

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, 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 dilutions should be discarded if not used within 12 hours.

Product Profile
Immunoblotting: a working antibody concentration of 1-2 µg/mL is recommended using rat liver extract (S1 fraction) and a HEK-293T cell lysate expressing human FRAP1.

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