

Product Information

Monoclonal Anti-ZFP36/TTP, clone TTP6

produced in mouse, tissue culture supernatant

Catalog Number **SAB4200565**

Product Description

Monoclonal Anti-ZFP36/TTP (mouse IgM isotype) is derived from the hybridoma TTP6 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a peptide corresponding to an internal sequence of human ZFP36/TTP (GeneID: 7538) conjugated KLH. The isotype is determined using a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is provided as culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-ZFP36/TTP recognizes human, monkey, bovine, dog, mouse and rat ZFP36/TTP. The antibody may be used in various immunochemical techniques including immunoblotting (~ 45 kDa). Staining of the ZFP36/TTP band in immunoblotting is specifically inhibited by the immunizing peptide.

mRNA decay is a critical mechanism in controlling the expression of many inflammation- and cancer-associated genes. These transcripts are targeted for rapid degradation through AU-rich element (ARE) motifs present in the mRNA 3' untranslated region (3'UTR). ZFP36 (also known as Tristetraprolin or TTP) is a RNA-binding protein that plays a significant role in regulating the expression of ARE-containing mRNAs. Regulation of ZFP36 occurs at multiple levels through cellular signaling events to control transcription, mRNA turnover, phosphorylation status, cellular localization, association with other proteins, and proteosomal degradation. All these impact its ability to promote ARE-mediated mRNA decay along with decay-independent functions of ZFP36.¹ Due to its ability to bind AREs and target the bound mRNA for rapid degradation, ZFP36 was found to limit the expression of a number of critical genes frequently overexpressed in inflammation and cancer.²

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative. The product contains fetal calf serum.

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 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

Immunoblotting: a working dilution of 1:4,000-1:8,000 is recommended using extracts of HepG2 cells.

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

References

1. Sanduja, S., et al., *Wiley Interdiscip. Rev.: RNA*, **2**, 42-57 (2010).
2. Sanduja, S., et al., *Front. Biosci.*, **17**, 174-188 (2012).

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