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Product Information

Anti-EDC4 (C-terminal)
produced in rabbit, affinity isolated antibody

Product Number **SAB4200113**

Product Description

Anti-EDC4 (C-terminal) is developed in rabbit using as the immunogen a synthetic peptide corresponding to a sequence at the C-terminal of human EDC4 (GeneID 23644) conjugated to KLH. The corresponding sequence is identical in rat and mouse. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-EDC4 (C-terminal) specifically recognizes human EDC4. The antibody may be used in several immuno-chemical techniques including immunoblotting (~150 kDa) and immunoprecipitation. Staining of the EDC4 band in immunoblotting is specifically inhibited with the immunizing peptide.

Decapping is a critical and highly regulated step in the turnover of mRNA, which involves decapping enzymes that hydrolyze the cap structure at the 5′ mRNA. mRNA decay typically is initiated with the removal of the 3′ polyA, followed by degradation of the mRNA in a 5′ to 3′ or 3′ to 5′ direction. In the 5′ to 3′ decay pathway, the m7G mRNA cap is cleaved by Dcp1, Dcp2, and EDC4 complex, in which Dcp2 is the catalytic subunit, and the mRNA is degraded by the major cytoplasmic 5′ to 3′ exonuclease XRN1.[1-3]

EDC4 (also known as HEDLS, Ge-1, enhancer of mRNA decapping 4, and Autoantigen RCD-8) contains an N-terminal WD40 repeat and a C-terminal domain which interacts with Dcp2 and mediates EDC4 oligomerization and P-body localization.[4] It was shown that hEDC4 associates with hDcp2 and stimulates hDcp2 activity *in vitro* as well as mediates the interaction between DCP1 and DCP2.[3]

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

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 is not recommended. Storage in “frost-free” freezers is also 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 0.5–1 μg/mL is recommended using lysates of HEK-293 cells overexpressing human EDC4.

Immunoprecipitation: a working antibody amount of 5-10 μg is recommended using lysates of HEK-293 cells overexpressing human EDC4.

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

References

1. Lyke-Andersen, J., *Mol. Cell. Biol.*, **22**, 8114-8121 (2002).
2. van Dijk, K. et al., *EMBO J.*, **21**, 6915-6024 (2002).
3. Fenger-Gron, M. et al, *Mol. Cell*, **20**, 905-915 (2005).
4. Jinek, M. at al., *RNA*, **14**, 1991-1998 (2008).

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