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Product Information

Anti-CYLD (C-terminal)

produced in rabbit, affinity isolated antibody

Product Number SAB4200061

Product Description

Anti-CYLD (C-terminal) is produced in rabbit using as the immunogen a synthetic peptide corresponding to a sequence at the C-terminal of human CYLD (GeneID: 1540), conjugated to KLH. The corresponding sequence differs by 3 amino acids in mouse and rat CYLD. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-CYLD (C-terminal) recognizes human CYLD. The antibody may be used in several immunochemical techniques including immunoblotting (~110 kDa) and immunohistochemistry. Detection of the CYLD band by immunoblotting is specifically inhibited by the immunizing peptide.

CYLD is a tumor suppressor protein exhibiting deubiquitination enzyme (DUB) activity that specifically cleaves Lys⁶³-linked polyUb. CYLD contains a ubiquitin C-terminal hydrolase (UCH) domain, which is responsible for the removal of ubiquitin chains, and three cytoskeleton-associated protein-glycineconserved (CAP-Gly) domains, which are found in various microtubule-binding proteins. CYLD physically interacts with many different proteins, some of which positively mediate signaling through the NF-κB and JNK pathways, and induces their deubiquitination. CYLD controls cell proliferation, cell survival and inflammatory responses by negatively regulating NF-κB and/or JNK-signaling pathways. CYLD also regulates other physiological pathways such as cell cycle progression, spermatogenesis, and osteoclastogenesis. Mutations in the CYLD gene have been associated with cylindromatosis, multiple familial trichoepithelioma, and Brooke-Spiegler syndrome. 1-4

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

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

Store at –20 °C. For continuous use, the product may be stored at 2–8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. 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

 $\frac{Immunoblotting}{2.5\text{-}5.0~\mu\text{g/mL}} \ \text{a working antibody concentration of} \\ 2.5\text{-}5.0~\mu\text{g/mL} \ \text{is recommended using a whole extract of} \\ \text{HEK-293T cells overexpressing human CYLD}.$

Immunohistochemistry: a working antibody concentration of 10-20 µg/mL is recommended using Biotin/ExtrAvidin®-Peroxidase staining of heat-retrieved formalin-fixed, paraffin-embedded human skin sections.

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

References

- 1. Bignell, G.R. et al., *Nat. Genet.*, **25**, 160-165 (2000).
- 2. Kovalenko, A. et al., Nature, 424, 801-805 (2003).
- 3. Wickström, S.A. et al., *EMBO J.*, **29**, 131-44 (2010).
- 4. Sun, S.C., Cell Death Differ., 17, 25-34 (2010).

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