

Product Information

Anti-RNF4 (11-25)

produced in rabbit, IgG fraction of antiserum

Catalog Number **SAB1100321**

Product Description

Anti-RNF4 (11-25) is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 11-25 of human RNF4 (GeneID 6047), conjugated to KLH. Whole antiserum is purified using protein A immobilized on agarose to provide the IgG fraction of antiserum.

Anti-RNF4 (11-25) specifically recognizes human RNF4 (not tested with other species). The antibody can be used in several immunochemical techniques including immunoblotting. Detection of the RNF4 band by immunoblotting is specifically inhibited by the immunizing peptide.

RNF4 (RING finger protein 4) is a RING finger motif containing protein that is involved in transcriptional and cell growth regulation. It has been shown to interact with, and inhibit the activity of, TRPS1, a transcription suppressor of GATA-mediated transcription.¹ In addition, RNF4 has been identified as an E3-ubiquitin ligase which binds polyubiquitinated chains covalently attached to proteins and targets them for ubiquitin mediated degradation. RNF4 localizes to nuclear bodies known as PML bodies, that contain endogenous promyelocytic leukemia (PML) protein and small ubiquitin-like modifier-1 (SUMO-1).² RNF4 was found to be activated by arsenic treatment of acute promyelocytic leukemia (APL). This treatment induces the modification of PML fused to retinoic acid receptor alpha (RAR) by SUMO and through RNF4 leads to proteasomal degradation.³

RNF4 is a modulator of steroid receptors and thus is expressed at very high levels in testis and at much lower levels in several other tissues⁴ and may play a role in spermatogenesis and in testicular tumorigenesis.⁵

Reagent

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

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 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 dilution of 1:500-1:1000 is recommended using lysates of HEK-293T cells over-expressing human recombinant RNF4 protein.

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

References

1. Kaiser, F.J., et al., *J. Biol. Chem.*, **278**, 3878-38785 (2003).
2. Häkli, M., et al., *Exp. Cell Res.*, **304**, 224-33 (2005).
3. Tatham, M.H., et al., *Nature Cell Biol.*, **10**, 538 - 546 (2008).
4. Yan, W., et al., *Mech. Dev.*, **118**, 247-253 (2002).
5. Hirvonen-Santti, S.J., et al., *Eur. Urol.*, **44**, 742-747 (2003).

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