Revision 1

Store at -20C

#12663

# TRIM27 Antibody

Cell Signaling TECHNOLOGY®

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source/Isotype: | UniProt ID: | Entrez-Gene Id: |
|---|---|---|---|---|---|---|
| W | H M R | Endogenous | 58 | Rabbit | #P14373 | 5987 |

## Product Usage Information

| Application | Dilution |
|---|---|
| Western Blotting | 1:1000 |

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

## Specificity/Sensitivity

TRIM27 Antibody recognizes endogenous levels of total TRIM27 protein. A background band is detected in some cell lines at 130 kDa.

## Species predicted to react based on 100% sequence homology

Monkey, Bovine

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu255 of human TRIM27 protein. Antibodies are purified by protein A and peptide affinity chromatography.

## Background

Tripartite motif containing protein 27 (TRIM27, RFP) is a member of the tripartite motif (TRIM) family whose members contain a RING domain, a B-box, and a coiled-coil region (together called RBCC). TRIM27 was originally discovered as part of an oncogenic DNA rearrangement resulting in a fusion of the amino terminal RBCC region of TRIM27 with the carboxyl terminal kinase domain of the receptor tyrosine kinase Ret (1). Overexpression of TRIM27 induces JNK and p38 MAPK activation as well as apoptosis (2). TRIM27 has been found to have pleiotropic effects including transcriptional repression (3,4), and E3 ligase activity for ubiquitin (5-7), and SUMO (8). TRIM27 was originally found to interact with Enhancer of Polycomb (EPC) and function as a transcriptional repressor (3). Subsequent studies have identified ubiquitin E3 ligase activity in TRIM27 as well as other members of the TRIM family (reviewed in 9). Potential substrates of TRIM27-mediated ubiquitination include class II PI3K-C2β, NOD2, and WASH. Elevated expression of TRIM27 has been observed in several types of cancer, where in some cases it may be a predictor of poor prognosis (10-13).

## Background References

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13. Zoumpoulidou, G. et al. (2012) *J Natl Cancer Inst* 104, 941-52.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**W:** Western Blotting

## Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat

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