

This product is for *in vitro* research use only and is not intended for use in humans or animals. This product is not intended for use as a therapeutic or in diagnostic procedures.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk	78 kDa	Rabbit**

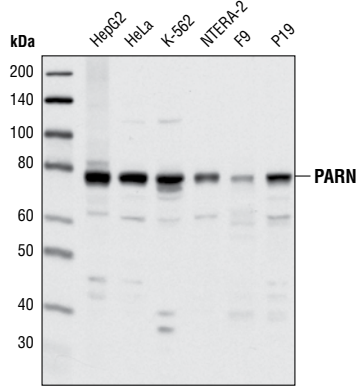
Background: Cellular levels of mRNAs are controlled by mRNA stability, the rate of synthesis and the rate of degradation. The presence and length of the poly(A) tail has been associated with mRNA stability (1). Exonucleolytic shortening of the poly(A) tail is the process that initiates the decay of many eukaryotic mRNAs (2). Poly(A)-specific ribonuclease (PARN) is the enzyme responsible for initiation of deadenylation and exonucleolytic shortening. Through an evolutionarily conserved mechanism, PARN also translationally silences selective mRNAs during early embryonic development (3). PARN is constitutively expressed in most mammalian tissues and plays a critical role in the post-transcriptional control of gene expression (4).

Specificity/Sensitivity: PARN (A42) Antibody detects endogenous levels of total PARN protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic (KLH-coupled) peptide corresponding to amino acid sequence surrounding Ala42 of human PARN. Antibodies are purified by Protein A and peptide affinity chromatography.

Background References:

- (1) Morales, J. et al. (1997) *J Biol Chem* 272, 6607–13.
- (2) Wilson, T. and Treisman, R. (1988) *Nature* 336, 396–9.
- (3) Sachs, A.B. et al. (1997) *Cell* 89, 831–8.
- (4) Fritz, D.T. et al. (2004) *Cell Biochem Biophys* 41, 265–78.



Western blot analysis of extracts from various cell lines using PARN (A42) Antibody.

Entrez-Gene ID #5073
Swiss-Prot Acc. #095453

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.

***Species cross-reactivity is determined by western blot.**
****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:
Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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