#3909 Store at -20°C

UTF1 Antibody

☑ 100 µl
(10 western blots)

Cell Signaling TECHNOLOGY®

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Entrez-Gene ID #9606
Swiss-Prot Acc. #Q5T230

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	M, R, (H)	40 kDa	Rabbit**

Background: Undifferentiated embryonic cell transcription factor 1 (UTF1) is expressed in cells of the inner cell mass and the epiblast (1). Expression is down-regulated with development, although it is maintained in the embryonic germ cells and in the adult gonads (1). Reduced expression in embryonic stem cells (ESCs) is associated with failure to differentiate properly, although self-renewal is unaffected (2). UTF1 is tightly associated with chromatin in mouse and human ESCs and may be involved in maintaining an epigenetic environment necessary for the pluripotent state (2,3). Co-expression of UTF1 with reprogramming factors c-Myc, Oct-4, Sox2 and KLF4, along with siRNA knock-down of p53 increased efficiency of induced pluripotent stem cell generation by 100 fold (4).

Specificity/Sensitivity: UTF1 Antibody detects endogenous levels of total UTF1 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino acid sequence near the C-terminus of human UTF1. Antibodies are purified by Protein A and peptide affinity chromatography.

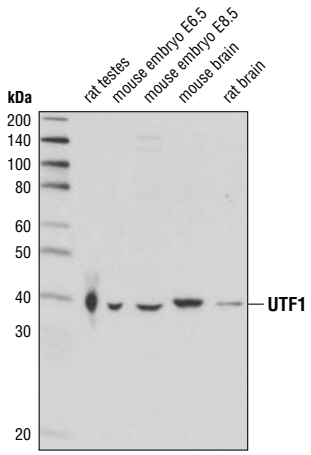
Background References:

(1) Okuda, A. et al. (1998) *EMBO J* 17, 2019–32.

(2) van den Boom, V. et al. (2007) *J Cell Biol* 178, 913–24.

(3) Kooistra, S.M. et al. (2009) *Stem Cell Res*, Epub ahead of print.

(4) Zhao, Y. et al. (2008) *Cell Stem Cell* 3, 475–9.



Western blot analysis of extracts from rat testes, mouse embryo E6.5 and E8.5, mouse brain and rat brain and using UTF1 Antibody.

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.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.