#7803 Store at -20°C

Cre Recombinase Antibody

☑ 100 µl
(10 western blots)

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
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New 03/12

For Research Use Only. Not For Use In Diagnostic Procedures.

Entrez-Gene ID #2777477
Swiss-Prot Acc. #P06956

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Transfected	All	38 kDa	Rabbit**

Background: Cre recombinase is a bacteriophage-P1 enzyme required for maintenance of the phage genome as a monomeric plasmid in the lysogenic state (1,2). This enzyme mediates a site-specific recombination between two 34 base pair loxP sites. This reaction can be carried out *in vitro*, indicating that it does not require accessory factors (3). The Cre/Lox system has been used for a number of *in vitro* and *in vivo* applications including targeted gene deletions (4) and gene-specific humanized animal models (5). Resolution of the crystal structure of the Cre-Lox complex revealed that two Cre molecules interact with a single Lox site (6).

Specificity/Sensitivity: Cre Recombinase Antibody recognizes transfected levels of total Cre recombinase protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp141 of Cre recombinase protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

(1) Abremski, K. et al. (1983) *Cell* 32, 1301-11.

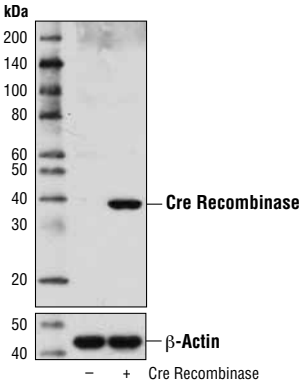
(2) Sternberg, N. et al. (1981) *Cold Spring Harb Symp Quant Biol* 45 Pt 1, 297-309.

(3) Abremski, K. and Hoess, R. (1984) *J Biol Chem* 259, 1509-14.

(4) Qin, M. et al. (1994) *Proc Natl Acad Sci U S A* 91, 1706-10.

(5) Lakso, M. et al. (1992) *Proc Natl Acad Sci U S A* 89, 6232-6.

(6) Guo, F. et al. (1997) *Nature* 389, 40-6.



Western blot analysis of extracts from 293T cells, mock-transfected (-) or transfected (+) with a Cre recombinase plasmid, using Cre Recombinase Antibody (upper) and β-Actin (13E5) Rabbit mAb #4970 (lower).

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 product 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 complementary products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 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.

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