

20-1058: Polyclonal antibody to Cre

Clonality :	Polyclonal
Application :	IP,IHC,WB
Gene :	Cre
Gene ID :	2777477
Uniprot ID :	P06956
Format :	Sera
Alternative Name :	Recombinase cre
Isotype :	Rabbit IgG
Immunogen Information :	A synthetic peptide of Cre protein (amino acids 2-11 SNLLTVHQNL) of the bacteriophage was used as immunogen for this antibody

Description

This antibody recognizes the recombinase protein, CRE. CRE is a 343 amino acid protein. The Cre enzyme, belongs to a member of a large family of recombinases, recognizes loxP which is a sequence motif of 34 bp from the P1 bacteriophage. Cre and lox comprise the Cre/lox system which was first developed in the late 1980 to artificially manipulate gene expression. As an example, mice with the Cre protein expressing in a specific cell type are bred with mice that contain a target gene surrounded by loxP sites. When the mice are bred, the cells carrying Cre will cause those cells to lose the target gene. If the Cre gene is, for example, bound to a promoter that only allows Cre production in neuronal cells, the target gene will be deleted only in those cells. This has led to its application in many experiments, for example in selectively labeling neuronal cells in the brain thereby differentiating them from other types of surrounding cells.

Product Info

Amount :	50 µl
Content :	50 µl sera
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

WB: 1:1000-1:2000, IHC (paraffin): 1:1000-1:5000, IHC (frozen): Users should optimize, IP: 1:50-1:200

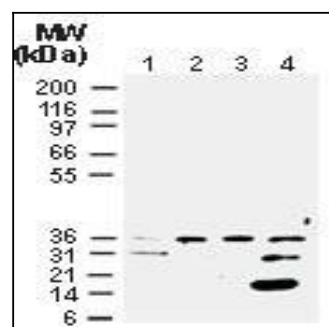


Fig:1 Western blot analysis of Cre using 20-1058 at 1:2000. Lane 1, wild-type mouse (negative control). Lanes 2 and 3, brain from 2 types of Cre transgenic mice. Lane 4, recombinant Cre (positive control). Full-length Cre is detected at ~36-38 kDa. The lower molecular weight bands in lane 4 are breakdown products from the recombinant Cre protein

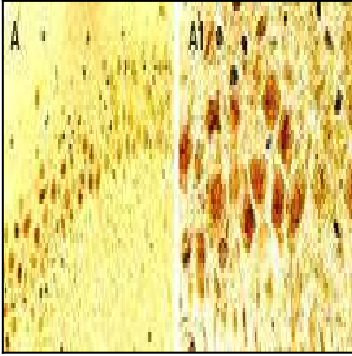


Fig:2 Immunohistochemical analysis of Cre in a formalin-fixed, paraffin embedded tissue section from the hippocampus of a Cre transgenic mouse using 20-1058 at 1:2000. In this mouse line, Cre is expressed in the brain, predominantly in the nuclei of most types of neurons. Hematoxylin-eosin counterstain. A1 is a higher magnification of A.