

### Instruction Manual

Catalog Number	PK-AB577-3360
Description	Transcription factor CREB binds the cAMP response element (CRE) and activates transcription in response to a variety of extracellular signals including neurotransmitters, hormones, membrane depolarization, and growth or neurotrophic factors. Protein kinase A and the calmodulin-dependent protein kinase CamonkeyII stimulate CREB phosphorylation at Ser133, a key regulatory site controlling transcriptional activity. Phosphorylation at Ser133 is also mediated by p44/42 MAP kinase, p90RSK, p38 MAP kinase and MSK1. CREB appears to play an important role in learning and memory in both flies and mice.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Synthetic peptide surrounding amino acid 109 of rat CREB.
Clone / IgG Subtype	Rabbit IgG
Species Reactivity	human, mouse, rat
Specificity	See Applications or Species Reactivity.
Formulation	100 µg (0.5 mg/ml) purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA and 0.01% thimerosal.
Reconstitution	Can be diluted in other aqueous buffers at the concentrations determined for the respective application.
Storage & Stability	Store at -20°C. For long-term storage, aliquot and refreeze at -70°C. Avoid repeated freeze/thaw cycles.
Applications	Western blotting (0.5-4 µg/ml), immunoprecipitation, immunohistochemistry. The optimal concentrations should be determined individually. Antibody might be suitable for other applications not tested so far. The antibody recognizes 43 kDa CREB and also 28-36 kDa CREB isoforms from samples of human, mouse and rat origins in Western blot analysis. Blocking peptide (Cat.# PK-AB577-3360P) is available separately.

FOR IN VITRO RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC PROCEDURES.