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Anti-CRHR1 Antibody

Catalog # AP59991

Product Information

Application	WB, IF/IC
Primary Accession	P34998
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47671

Additional Information

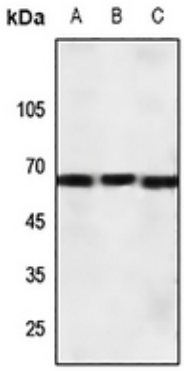
Gene ID	1394
Other Names	CRFR; CRFR1; CRHR; Corticotropin-releasing factor receptor 1; CRF-R-1; CRF-R1; CRFR-1; Corticotropin-releasing hormone receptor 1; CRH-R-1; CRH-R1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CRHR1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

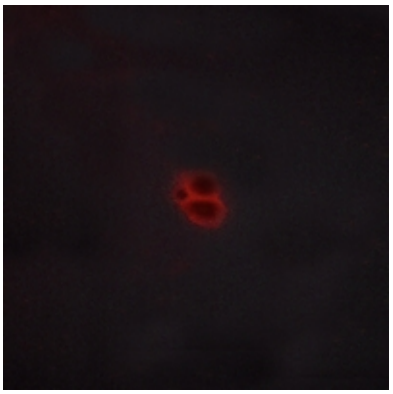
Name	CRHR1 (HGNC:2357)
Function	G protein-coupled receptor for CRH and UCN stress hormones, which plays a central role in whole body adaptation to stress (PubMed:18292205, PubMed:18801728, PubMed:20966082, PubMed:23576434, PubMed:23863939, PubMed:24290358, PubMed:32004469, PubMed:32004470). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and downstream effectors, such as adenylate cyclase (PubMed:18292205, PubMed:32004469, PubMed:32004470). CRHR1 is mainly coupled to G(s) G protein (GNAS), mediating activation of adenylate cyclase activity and production of cAMP (PubMed:18292205, PubMed:32004469, PubMed:32004470). In some conditions, can also couple to G(q) G protein (GNAQ) and mediate production of diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) second messengers (PubMed:14657255). CRHR1-dependent signaling is a primary mediator of the neuroendocrine, autonomic (fight-or-flight) and behavioral responses to stress, acting as a key

	regulator of adaptation by activating the hypothalamus-pituitary-adrenal axis, leading to corticotropin hormone (ACTH) production (By similarity). Mediates both anxiogenic and anxiolytic response to stress in glutamatergic and dopaminergic neurons, respectively (By similarity). CRHR1 also plays a critical role in addiction by mediating the brain's stress response, particularly during withdrawal and relapse: it drives the transition to compulsive drug seeking by increasing anxiety and negative emotional states (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Note=Agonist-binding promotes endocytosis.
Tissue Location	Predominantly expressed in the cerebellum, pituitary, cerebral cortex and olfactory lobe

Images



Western blot analysis of CRHR1 expression in HEK293T (A), Hela (B), DLD (C) whole cell lysates. (Predicted band size: 50 kD; Observed band size: 66 kD)



Immunofluorescent analysis of CRHR1 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.