

Rabbit Anti-EGR4/AP Conjugated antibody

SL14522R-AP

Product Name	Anti-EGR4/AP
Chinese Name	碱性磷酸酶 (AP) 标记的早期生长反应蛋白 4 抗体
Alias	AT133; EGR4_HUMAN; Early growth response protein 4; Nerve growth factor induced clone C; NGFI C; NGFIC; PAT133.
Research Area	Cell biology Neurobiology transcriptional regulatory factor Zinc finger protein
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	(predicted:Human,Mouse,Rat,Dog,Pig,Cow,Horse) IHC-P=1:100-500,IHC-F=1:100-500,ELISA=1:500-5000
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	62kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human EGR4
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Storage	
Product Detail	background: Egr-1, Egr-2, Egr-3 and Egr-4 are nuclear transcription factors belonging to the Egr C2H2-type zinc-finger protein family and containing three C2H2-type zinc fingers. As immediate early proteins, Egr transcription factors are rapidly induced by diverse extracellular stimuli. They are subject to tight differential control through diverse mechanisms at several levels of regulation: transcriptional; translational and posttranslational (including glycosylation,

phosphorylation and redox) mechanisms; and protein-protein interaction. Egr-1 binds to the DNA sequence 5'-CGCCCCCGC-3' (Egr-site), thereby activating transcription of target genes whose products are required for mitogenesis and differentiation. Egr-2 binds specific DNA sites located in the promoter region of HoxA4. Egr-2 defects cause congenital hypomyelination neuropathy (also designated Charcot-Marie-Tooth disease) and Dejerine-Sottas neuropathology (also designated hereditary motor and sensory neuropathy III). Egr-3 is involved in muscle spindle development and is expressed in T cells 20 minutes following activation. Egr-4 binds to the Egr consensus motif GCGTGGGCG, functions as a transcriptional repressor, and displays autoregulatory activities, downregulating its own gene promoter in a dose dependent manner.

Function:

EGR4(Early Growth Response protein 4) is a zinc-finger transcription factor that activates the transcription of genes whose products are required for mitogenesis and differentiation. EGR4 is closely related to nerve growth factor-induced clone A (NGFI-A or EGR1), EGR2, and EGR3. These four early response (immediate early) proteins all contain very similar zinc-finger DNA binding domains and five highly homologous subdomains. EGR4 functionally cooperate with NFAT proteins and induce expression of IL2 and TNFalpha. Early growth response proteins (EGR) and nuclear factors of activated T cells (NFAT) form heterodimers and regulate proinflammatory cytokine gene expression.

Subcellular Location:

Nuclear

Similarity:

Belongs to the EGR C2H2-type zinc-finger protein family.
Contains 3 C2H2-type zinc fingers.

Database links:

[Entrez Gene: 1961](#) Human

[Entrez Gene: 407155](#) Cow

[Entrez Gene: 13656](#) Mouse

[Entrez Gene: 25129](#) Rat

[Omim: 128992](#) Human



[SwissProt: Q9GL32](#) Cow

[SwissProt: Q05215](#) Human

[SwissProt: Q9WUF2](#) Mouse

[SwissProt: Q00911](#) Rat

[Unigene: 3052](#) Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.