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Rabbit Anti-HES2/AP Conjugated antibody

SL12383R-AP

Product Name	Anti-HES2/AP
Chinese Name	碱性磷酸酶（AP）标记的转录因子 HES2 抗体
Alias	bHLHb40; Class B basic helix loop helix protein 40; Hairy and enhancer of split 2 (Drosophila); Transcription factor HES 2; HES2_HUMAN.
Research Area	Developmental biology Neurobiology transcriptional regulatory factor Epigenetics
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Mouse(predicted:Human,Rat,Dog,Cow,Horse)
Applications	IHC-P=1:100-500,IHC-F=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	18kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human HES2
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	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.
Product Detail	**background:** The Drosophila hairy and Enhancer of split genes encode basic helix-loop-helix (bHLH) transcriptional repressors that function in the Notch signaling pathway and control segmentation and neural development during embryogenesis. The mammalian homologues of Drosophila hairy and Enhancer of split are the HES gene family members, HES1-6, which also encode bHLH transcriptional repressors that regulate myogenesis and

neurogenesis. The HES family members form a complex with TLE, the mammalian homologue of Groucho, and this interaction is mediated by the carboxy terminal WRPW motif of the HES proteins. The HES/TLE complex functions by directly binding to DNA, instead of interfering with activator proteins. Most HES family members, including HES1 and HES5, preferentially bind to the N box (CACNAG) as opposed to the E box (CANNTG). HES2 binds to both N and E box sites, while HES6 does not bind DNA. Rather, HES6 inhibits HES1 activity, thereby promoting transcription. HES1 and HES2 are expressed in a variety of adult and embryonic tissues. HES3 is expressed exclusively in cerebellar Purkinje cells, and HES5 is found solely in the nervous system. HES6 is produced in brain as well as in the limb buds of developing embryos.

Function:
Transcriptional repressor of genes that require a bHLH protein for their transcription.

Subunit:
Transcription repression requires formation of a complex with a corepressor protein of the Groucho/TLE family (By similarity).

Subcellular Location:
Nuclear.

Tissue Specificity:
Expressed in placenta, pancreatic cancer, colon cancer with RER, cervical cancer, and in head and neck tumors.

Similarity:
Contains 1 bHLH (basic helix-loop-helix) domain.
Contains 1 Orange domain.

Database links:

Entrez Gene: 54626 Human

Entrez Gene: 15206 Mouse

Entrez Gene: 29567 Rat

Omim: 609970 Human

SwissProt: Q9Y543 Human

SwissProt: O54792 Mouse

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SwissProt: P35429 Rat

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