



Rabbit Anti-Axin 2 antibody

SL5717R

Product Name:	Axin 2
Chinese Name:	轴抑制蛋白2抗体
Alias:	Axil; Axin like protein; Axin-2; Axin-like protein; Axin2; Axis inhibition protein 2; AXIN2_HUMAN; Conductin.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	93kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Axin 2 corresponding:331-430/843
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% 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 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Inhibitor of the Wnt signaling pathway. Down-regulates beta-catenin. Probably facilitate the phosphorylation of beta-catenin and APC by GSK3B. Involvement in disease:Defects in AXIN2 are involved in colorectal cancer (CRC). They appear to be specifically associated with defective mismatch repair. Defects in AXIN2 are the cause of oligodontia-colorectal cancer syndrome (ODCRCS).

Affected individuals manifest severe tooth agenesis and colorectal cancer or precancerous lesions of variable types.

Function:

Inhibitor of the Wnt signaling pathway. Down-regulates beta-catenin. Probably facilitate the phosphorylation of beta-catenin and APC by GSK3B (By similarity).

Subunit:

Interacts with glycogen synthase kinase-3 beta (GSK3B) and beta-catenin. The interaction between axin and beta-catenin occurs via the armadillo repeats contained in beta-catenin (By similarity). Interacts with SMAD7 and RNF111. Interacts with ANKRD6.

Subcellular Location:

Cytoplasm.

Tissue Specificity:

Expressed in brain and lymphoblast.

Post-translational modifications:

Probably phosphorylated by GSK3B and dephosphorylated by PP2A (By similarity). ADP-ribosylated by tankyrase TNKS and TNKS2. Poly-ADP-ribosylated protein is recognized by RNF146, followed by ubiquitination and subsequent activation of the Wnt signaling pathway.

Ubiquitinated by RNF146 when poly-ADP-ribosylated, leading to its degradation and subsequent activation of the Wnt signaling pathway. Deubiquitinated by USP34, deubiquitinated downstream of beta-catenin stabilization step: deubiquitination is important Wnt signaling to positively regulate beta-catenin (CTNBB1)-mediated transcription.

DISEASE:

Defects in AXIN2 are involved in colorectal cancer (CRC) [MIM:114500]. They appear to be specifically associated with defective mismatch repair.

Defects in AXIN2 are the cause of oligodontia-colorectal cancer syndrome (ODCRCS) [MIM:608615]. Affected individuals manifest severe tooth agenesis and colorectal cancer or precancerous lesions of variable types.

Similarity:

Contains 1 DIX domain.
Contains 1 RGS domain.

SWISS:

Q9Y2T1

Gene ID:

8313

Database links:

[Entrez Gene: 8313](#)Human

[Entrez Gene: 12006](#)Mouse

[Entrez Gene: 29134](#)Rat

[Omim: 604025](#)Human

[SwissProt: Q9Y2T1](#)Human

[SwissProt: O88566](#)Mouse

[SwissProt: O70240](#)Rat

[Unigene: 156527](#)Human

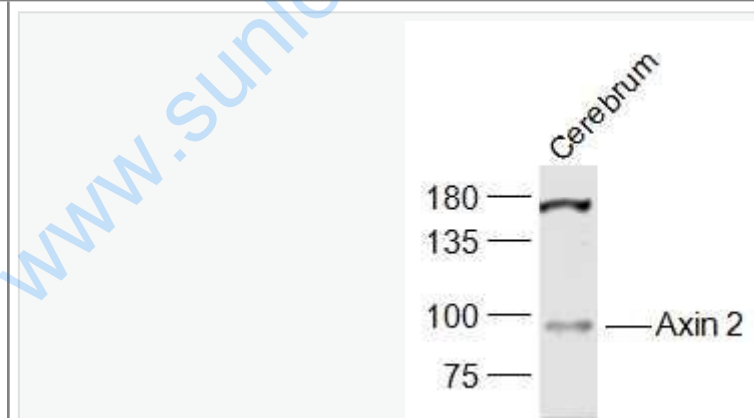
[Unigene: 71710](#)Mouse

[Unigene: 162212](#)Rat

Important Note:

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

Picture:



Sample:

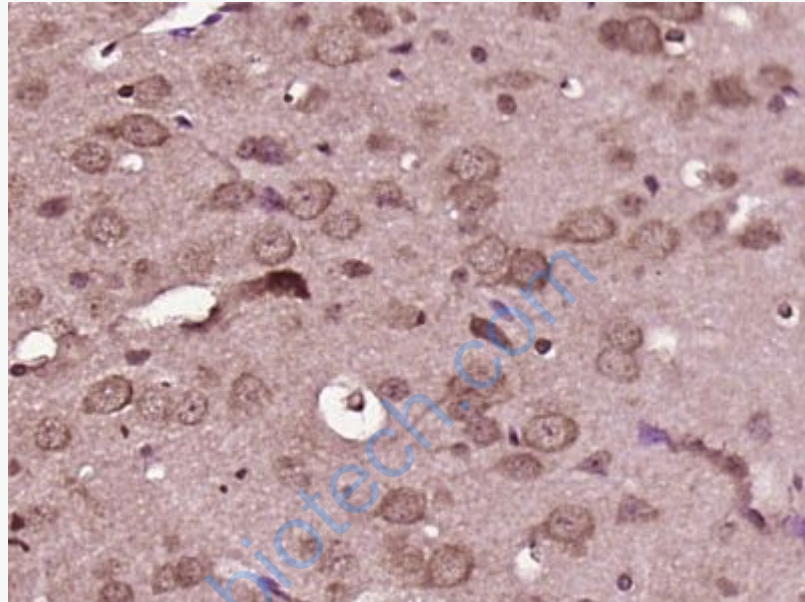
Cerebrum (Mouse) Lysate at 40 ug

Primary: Anti-Axin 2 (SL5717R) at 1/1000 dilution

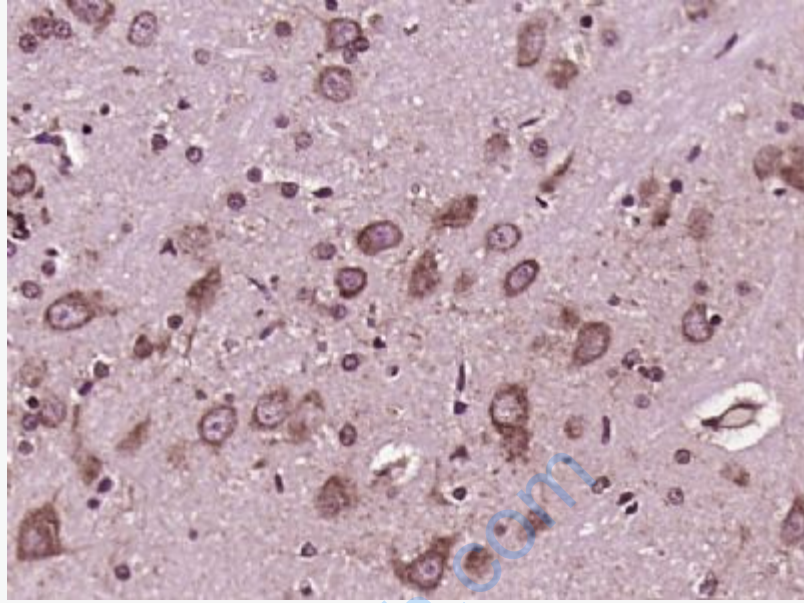
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 93 kD

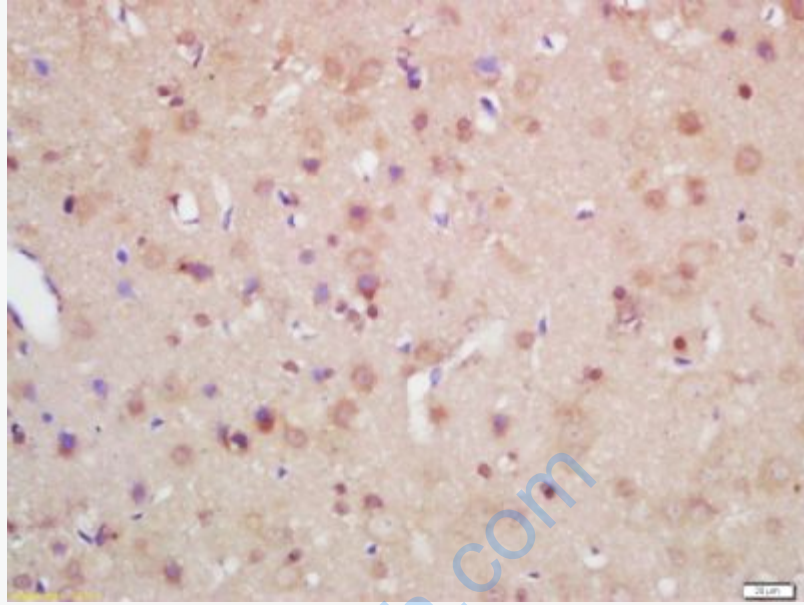
Observed band size: 93 kD



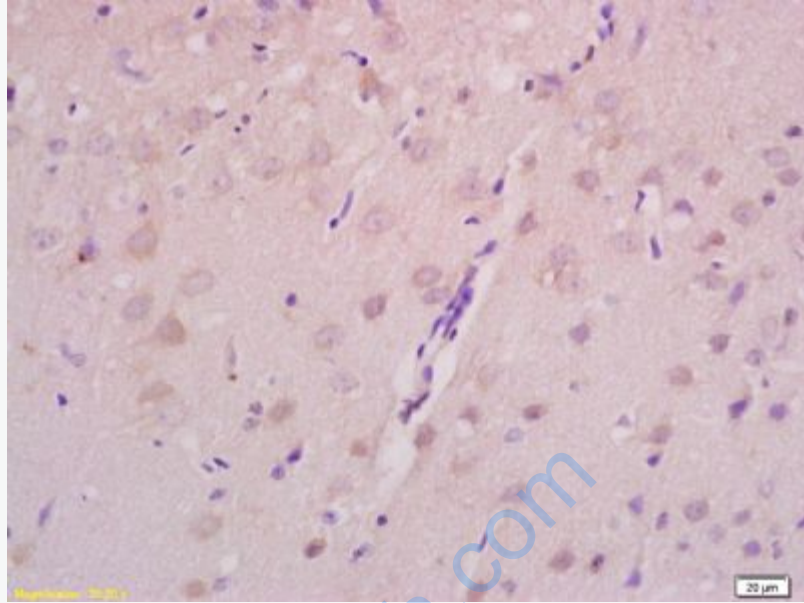
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Axin 2) Polyclonal Antibody, Unconjugated (SL5717R) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Axin 2) Polyclonal Antibody, Unconjugated (SL5717R) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-Axin 2 Polyclonal Antibody, Unconjugated(SL5717R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
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