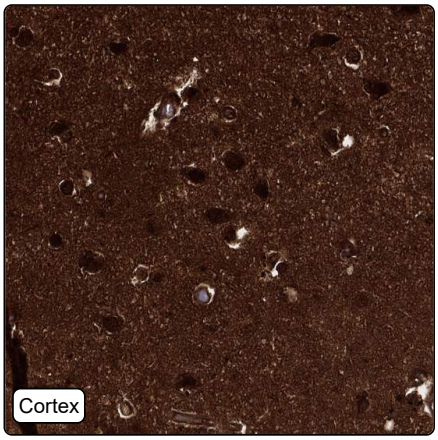
CPTC-YWHAB-3 (CAB080290)

Uniprot ID: P31946
Protein name: 1433B_HUMAN
Full name: 14-3-3 protein beta/alpha
Function: Adapter protein implicated in the regulation of a large spectrum of both general and specialized signaling pathways. Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif. Binding generally results in the modulation of the activity of the binding partner. Negative regulator of osteogenesis. Blocks the nuclear translocation of the phosphorylated form (by AKT1) of SRPK2 and antagonizes its stimulatory effect on cyclin D1 expression resulting in blockage of neuronal apoptosis elicited by SRPK2. Negative regulator of signaling cascades that mediate activation of MAP kinases via AKAP13.
Subcellular location:
Unnamed:
Cytoplasm (*experimental evidence*)
Melanosome (*experimental evidence*)
NOTE: Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
Unnamed:
Vacuole membrane (*experimental evidence*)
NOTE: (Microbial infection) Upon infection with Chlamydia trachomatis, this protein is associated with the pathogen-containing vacuole membrane where it colocalizes with IncG.
Protein existence: Experimental evidence at protein level

Comment:

Immunohistochemistry



IHC protocol:	HIER pH6, Dilution 1:2500
IHC test staining:	Cytoplasmic positivity in all tissues.
Literature conformance:	Consistent with extensive gene/protein characterization data
Literature significance:	
RNA similarity:	High consistency between antibody staining and RNA expression data
RNA tissue specificity:	Low tissue specificity
RNA tissue distribution:	Detected in all
IHC Sibling similarity:	Other antibody shows similar IHC staining pattern
Reliability score:	Supported
APE summary:	Ubiquitous cytoplasmic expression.
APE explanatory sentences:	High consistency between antibody staining and RNA expression data. Caution, targets protein from more than one gene. Pending external verification.
Orthogonal validation:	No
Independent validation:	No
IHC Annotation summary:	Most normal tissues showed strong cytoplasmic positivity. Most cancers showed strong cytoplasmic positivity.