

FRY/C13orf14 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP56168

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q5TBA9
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	338875
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FRY/C13orf14
Epitope Specificity	101-200/3013
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. Note=Distributed diffusely throughout the cytoplasm in interphase. Localizes to the separating centrosomes in prophase, to the spindle poles and spindle microtubules in prometaphase to metaphase, to spindle microtubules in anaphase and to the distal sections of the midbody in cytokinesis. Colocalizes with PLK1 to separating centrosomes and spindle poles from prophase to metaphase in mitosis, but not in other stages of the cell cycle.
SIMILARITY	Belongs to the furry protein family.
SUBUNIT	When phosphorylated by CDK1, interacts with PLK1; this interaction occurs in mitotic cells, but not in interphase cells, and leads to further phosphorylation by PLK1. Interacts with AURKA.
Post-translational modifications	Phosphorylated by AURKA, CDK1 and PLK1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	In yeast, flies, and worms, the Dbf2-related (Ndr) kinase protein family functions in various aspects of cell polarity and morphogenesis. The <i>Drosophila melanogaster</i> protein, furry, is responsible for maintaining integrity of polarized cell extensions, such as epidermal hair cells, lateral extensions of the arista and the shafts of neuronal sensory bristles. Mutations in furry lead to the formation of branched arista laterals, bristles and hairs. The yeast homolog of furry, Mor2, is important for the localization of F-actin specifically at the cell ends and is required for the restriction of the growth zones. The mammalian homolog of the <i>Drosophila</i> furry protein is FRY, also known as C13orf14, a 3,013 amino acid protein that probably functions as a transcription factor for genes that regulate the actin cytoskeleton. The gene encoding FRY maps to chromosome 13, which comprises nearly 4% of human DNA and contains around 114 million base pairs and 400 genes.

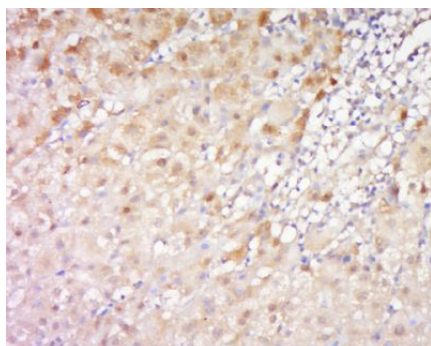
Additional Information

Gene ID	10129
Other Names	Protein furry homolog, FRY, C13orf14
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	FRY
Synonyms	C13orf14
Function	Plays a crucial role in the structural integrity of mitotic centrosomes and in the maintenance of spindle bipolarity by promoting PLK1 activity at the spindle poles in early mitosis. May function as a scaffold promoting the interaction between AURKA and PLK1, thereby enhancing AURKA-mediated PLK1 phosphorylation.
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. Note=Distributed diffusely throughout the cytoplasm in interphase. Localizes to the separating centrosomes in prophase, to the spindle poles and spindle microtubules in prometaphase to metaphase, to spindle microtubules in anaphase and to the distal sections of the midbody in cytokinesis. Colocalizes with PLK1 to separating centrosomes and spindle poles from prophase to metaphase in mitosis, but not in other stages of the cell cycle

Images



Tissue/cell:human hepatocellular carcinoma; 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-FRY/C13orf14 Polyclonal Antibody, Unconjugated(AP56168) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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