

# Rabbit Anti-FRY/C13orf14 antibody

# SL16183R

Product Name:	FRY/C13orf14
Chinese Name:	13号染色体开放阅读框14抗体
Alias:	C13orf14; FRY HUMAN; Protein furry homolog.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=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:	339kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FRY/C13orf14:101-200/3013
Lsotype:	$\lg G$
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:	<u>PubMed</u>
Product Detail:	In yeast, flies, and worms, the Dbf2-related (Ndr) kinase protein family functions in various aspects of cell polarity and morphogenesis. The Drosophila melanogaster 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 Drosophila 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.

#### **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.

#### 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.

## **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.

# Post-translational modifications:

Phosphorylated by AURKA, CDK1 and PLK1.

# Similarity:

Belongs to the furry protein family.

## **SWISS:**

O5TBA9

#### Gene ID:

10129

#### Database links:

Entrez Gene: 10129 Human

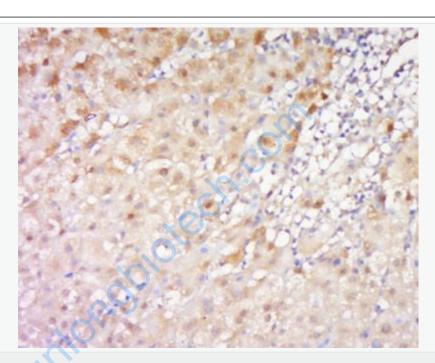
Omim: 614818 Human

SwissProt: Q5TBA9 Human

Unigene: 507669 Human

# **Important Note:**

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



# Picture:

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(SL16183R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining