



Rabbit Anti-FISH antibody

SL11645R

Product Name:	FISH
Chinese Name:	FISH蛋白抗体
Alias:	Adapter protein TKS5; Five SH3 domain-containing protein; SH3 and PX domain-containing protein 2A; SH3 multiple domains protein 1; Sh3md1; Sh3pxd2a; SPD2A_HUMAN; TKs5; Tyrosine kinase substrate with five SH3 domains.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
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:	125kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FISH:261-360/1133
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:	Fish, a potential Src substrate, is a broadly expressed adaptor protein containing five SH3 domains and a phox homology (PX) domain (1). The Src family of protein tyrosine kinases act in signal transduction pathways (2-4). Src kinases vary in expression but are strongly regulated in vivo; catalytic activity is repressed by interacting with the SH3 domain (5-7). In Src-transformed fibroblasts and in normal cells treated with certain

growth factors fish is tyrosine-phosphorylated (1). Treatment of cells with cytochalasin D results in rapid tyrosine phosphorylation of fish, along with activation of Src (1). Fish is likely to be involved in tyrosine kinase signaling and may have a role in cytoskeletal changes (1).

Function:

Adapter protein involved in invadopodia and podosome formation, extracellular matrix degradation and invasiveness of some cancer cells. Binds matrix metalloproteinases (ADAMs), NADPH oxidases (NOXs) and phosphoinositides. Acts as an organizer protein that allows NOX1- or NOX3-dependent reactive oxygen species (ROS) generation and ROS localization. In association with ADAM12, mediates the neurotoxic effect of beta-amyloid peptide.

Subunit:

Interacts (via N-terminus) with CYBA (By similarity). Interacts with ADAM12, ADAM15 and ADAM19. Interacts with NOXO1. Interacts (via SH3 domains) with NOXA1. Interacts with FASLG.

Subcellular Location:

Cytoplasm. Cell projection > podosome. Cytoplasmic in normal cells and localizes to podosomes in SRC-transformed cells.

Tissue Specificity:

Found in several cancer cell lines, particularly invasive breast carcinomas and melanomas.

Post-translational modifications:

Tyrosine phosphorylated by SRC. Phosphorylation plays a regulatory role in the protein localization. The intramolecular interaction of the PX domain with the third SH3 domain maintains the protein in the cytoplasm and phosphorylation disrupts this interaction, resulting in the redistribution of the protein from cytoplasm to the perimembrane region. Phosphorylated on serine upon DNA damage, probably by ATM or ATR.

Similarity:

Belongs to the SH3PXD2 family.
Contains 1 PX (phox homology) domain.
Contains 5 SH3 domains.

SWISS:

Q5TCZ1

Gene ID:

9644

Database links:

[Entrez Gene: 9644](#)Human

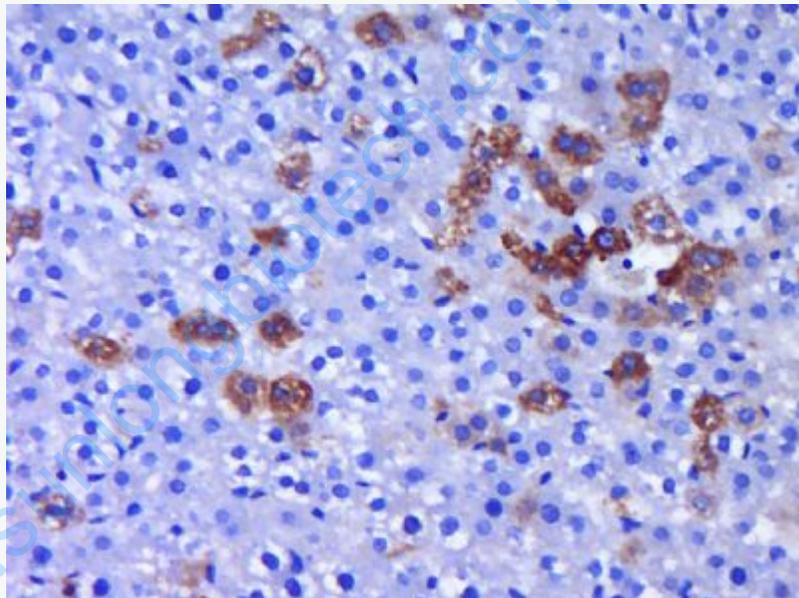
[SwissProt: Q5TCZ1](#)Human

[Unigene: 594708](#)Human

[Unigene: 728193](#)Human

Important Note:

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



Picture:

Paraformaldehyde-fixed, paraffin embedded (Rat liver); 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 (FISH) Polyclonal Antibody, Unconjugated (SL11645R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.