

**FISH Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP54577**

**Specification**

**FISH Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">Q5TCZ1</a>
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	125 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FISH
Epitope Specificity	261-360/1133
Isotype	IgG
<b>Purity</b>	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Cell projection > podosome. Cytoplasmic in normal cells and localizes to podosomes in SRC-transformed cells.
SIMILARITY	Belongs to the SH3PXD2 family. Contains 1 PX (phox homology) domain. Contains 5 SH3 domains.
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.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

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).

## FISH Polyclonal Antibody - Additional Information

### Gene ID 9644

#### Other Names

SH3 and PX domain-containing protein 2A, Adapter protein TKS5, Five SH3 domain-containing protein, SH3 multiple domains protein 1, Tyrosine kinase substrate with five SH3 domains, SH3PXD2A, FISH, KIAA0418, SH3MD1, TKS5

#### Target/Specificity

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

#### Dilution

<span class = "dilution\_IHC-P">IHC-P~~N/A</span><br /><span class = "dilution\_IHC-F">IHC-F~~N/A</span><br /><span class = "dilution\_IF">IF~~1:50~200</span><br /><span class = "dilution\_ICC">ICC~~N/A</span><br /><span class = "dilution\_E">E~~N/A</span>

#### 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.

## FISH Polyclonal Antibody - Protein Information

### Name SH3PXD2A ([HGNC:23664](#))

#### Function

Adapter protein involved in invadopodia and podosome formation, extracellular matrix degradation and invasiveness of some cancer cells (PubMed:<a href="http://www.uniprot.org/citations/27789576" target="\_blank">27789576</a>). 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 amyloid-beta peptide.

#### Cellular Location

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

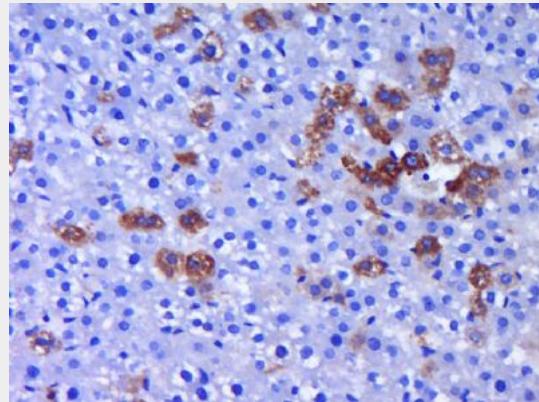
#### Tissue Location

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

## FISH Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**FISH Polyclonal Antibody - Images**

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 (bs-11645R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.