

SPDYA Rabbit pAb

Catalog # AP98919

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q5MJ70
Other Accession	Q5MJ70
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36463
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPDYA
Epitope Specificity	98-180/313
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the Speedy/Ringo family.
SUBUNIT	Interacts with CDK1, CDK2 and CDKN1B/KIP1. Found in a complex with both CDK2 and CDKN1B/KIP1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SPDYA (speedy homolog A (Drosophila)) regulates the G1/S phase transition of the cell cycle by binding and activating CDC2, CDK2 and CDKN1B/KIP1. SPDYA can activate CDK2 without promoting CDK2 phosphorylation. SPDYA mediates cell survival during the DNA damage process through activation of CDK2.

Additional Information

Gene ID	245711
Other Names	RINGO3; RINGOA; SPDY1; SPY1; 4921517J08Rik; 4930548B21Rik; GS4; MLZ-465; Lm23; SPDYA_HUMAN; SPDYA; Rapid inducer of G2/M progression in oocytes A (RINGO A hSpy/Ringo A); Speedy-1 (Spy1); SPDYA_MOUSE; Protein expressed in male leptotene and zygotene spermatocytes 465 (MLZ-465); Rapid inducer of G2/M progression in oocytes A (RINGO A mSpy/Ringo A); SPDYA_RAT; Rapid inducer of G2/M progression in oocytes A (RINGO A); speedy/RINGO cell cycle regulator family member A; speedy homolog 1 (Drosophila); speedy homolog A (Xenopus laevis)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	SPDYA (HGNC:30613)
Function	Regulates the G1/S phase transition of the cell cycle by binding and activating CDK1 and CDK2 (PubMed: 12972555). Contributes to CDK2 activation without promoting CDK2 phosphorylation, by inducing a conformation change of the CDK2 T-loop that obstructs the substrate- binding cleft prior to kinase activation (PubMed: 28666995). Mediates cell survival during the DNA damage process through activation of CDK2 (PubMed: 12839962).
Cellular Location	Nucleus
Tissue Location	Highly expressed in testis. Expressed at a low level in wide range of tissues including bone marrow, brain, heart, kidney, colon, liver, placenta, spleen, skeletal muscle, salivary gland, thyroid gland, thymus, trachea and uterus. Expressed at a slightly higher level in adrenal gland, cerebellum, small intestine, lung, prostate and trachea. Expression is cell cycle-dependent, being restricted to cells in G1/S phase.

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