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SPDYA Rabbit pAb

Catalog # AP98919

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q5MJ70
Other Accession	Q5MJ70
Reactivity	Rat
Predicted	Pig, Human, Mouse, Rabbit, Dog, Horse
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'.