

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human p21/CIP1/CDKN1A in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 195720
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human p21/CIP1/CDKN1A Ser2-Pro164 Accession # P38936
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	MCF-7 human breast cancer cell line treated with 1 µM camptothecin (CPT) for 16 hours was fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005)

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

p21^{CIP1}, also called CIP1 (CDK-interacting protein 1) and CDKN1A, is a 21 kDa Cyclin/Cyclin-dependent kinase (Cdk) inhibitor that blocks cell cycle progression from G₁ to S phase in the cell cycle. Because p21 is a transcriptional target of the p53 tumor suppressor, p21 expression increases in cells that contain stabilized p53 due to genotoxic stress exposure.

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