

DESCRIPTION

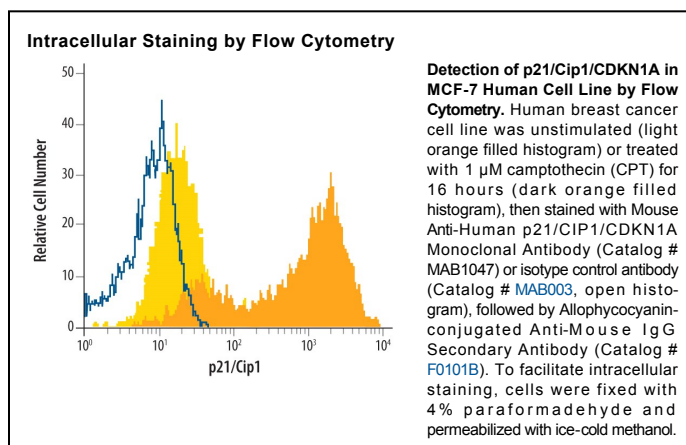
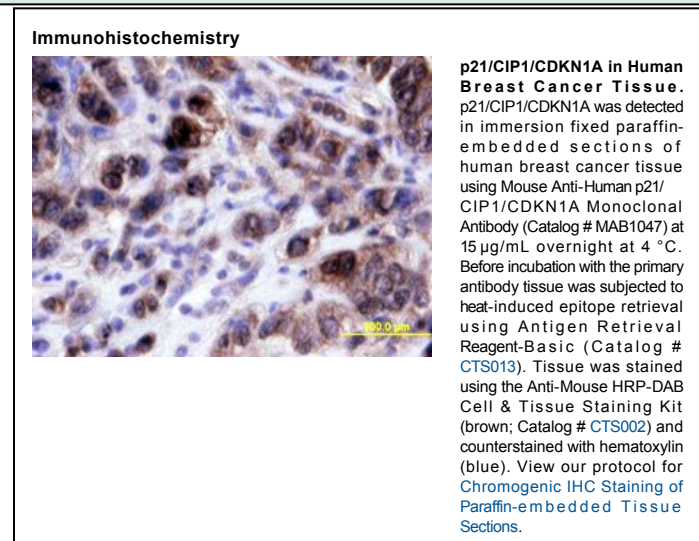
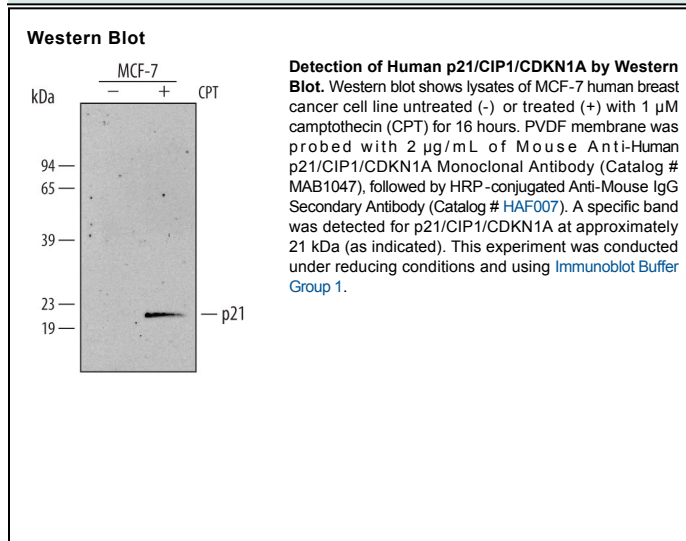
Species Reactivity	Human
Specificity	Detects human p21/CIP1/CDKN1A in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 195720
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human p21/CIP1/CDKN1A Ser2-Pro164 Accession # P38936
Formulation	Supplied as a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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
Western Blot	2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Immunoprecipitation	4 µg/500 µg cell lysate	MCF-7 human breast cancer cell line treated with camptothecin (CPT), see our available Western blot detection antibodies
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.
*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C, as supplied.
- 1 month, 2 to 8 °C under sterile conditions after opening.
- 6 months, -20 to -70 °C under sterile conditions after opening.

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.