

Recombinant p27Kip1 (Mitotic Inhibitor / Suppressor Protein) Antibody

Mouse Monoclonal Antibody [Clone r1B4]

Catalog No	Format	Size
1027-MSM12-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
1027-MSM12-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
1027-MSM12-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

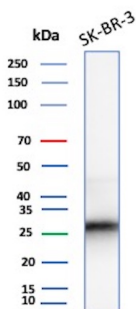
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

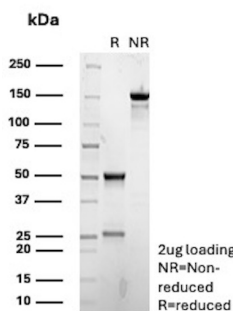
Clone	r1B4
Gene Name	CDKN1B
Immunogen	Prokaryotic recombinant antigen corresponding to the full length p27 molecule
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2a / Kappa
Mol. Weight of Antigen	25-26kDa
Cellular Localization	Endosome, Nucleus
Species Reactivity	Human
Positive Control	ZR75, MCF7, MDA-MB-231 or SK-BR-3 cells. Human placenta, Brain, tonsil or spleen.

*Optimal dilution for a specific application should be determined.

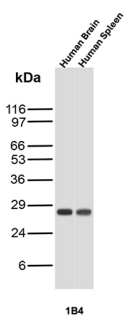
Product Images for Recombinant p27Kip1 (Mitotic Inhibitor / Suppressor Protein) Antibody



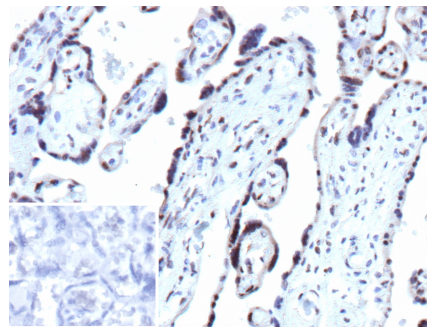
Western blot analysis of SK-BR-3 cell lysate using p27 Recombinant Mouse Monoclonal Antibody (r1B4).



SDS-PAGE Analysis of Purified p27 Recombinant Mouse Monoclonal Antibody (r1B4). Confirmation of Purity and Integrity of Antibody.



Western blot analysis of Human Brain and Human Spleen tissue lysates using p27 Recombinant Mouse Monoclonal Antibody (r1B4).



Formalin-fixed, paraffin-embedded human placenta stained with p27Kip1 Recombinant Mouse Monoclonal Antibody (r1B4). Inset: PBS instead of primary antibody; secondary only negative control.

Specificity & Comments

p27 protein, also known as kinase inhibitory protein 1 (Kip1), is a polypeptide which binds to cyclin E/cdk2 complexes (but not to cdk2 alone) and is detected in purified extracts of growth-arrested cells. p27 protein constrains cell proliferation by setting the threshold level of cyclin E necessary to activate cdk2. The 27kD protein is also present in proliferating cells but only in a sequestered form when it is unavailable to interact with cyclin E/cdk2 complexes. It is likely that cyclin D complexed with catalytically inactive cdk4 is sufficient to sequester p27 and titrate its function. The presence of bound p27 in proliferating cells suggests that its role may not be restricted to inducing cell cycle arrest but to also set the cyclin E threshold for execution of the G1 to S phase transition during each mitotic cycle.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab produced in CHO cell mammalian-based expression system. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

AKT Signaling, Cancer, Cardiovascular, Cytokine Signaling, Immunology, Infectious Disease, Lung Cancer, Nuclear Marker, Ovarian Cancer, Signal Transduction, Transcription Factors