

P21 Antibody

Datasheet

For Research Use Only

Description	Catalog No.	Size
P21 Concentrate	FP-A113-01	0.1 ml
P21 Concentrate	FP-A113-10	1 ml
P21 Concentrate	FP-A113-70	7 ml
P21 Concentrate	FP-A113-250	25 ml

Description

p21, also known as p21Cip1, p21Waf1, Cyclin-Dependent Kinase Inhibitor 1, or CDK-Interacting Protein 1, functions to regulate cell cycle progression at G1 by inhibiting the activity of Cyclin-CDK2 or -CDK4 complexes. This cyclin-dependent kinase inhibitor is expressed in all adult human tissues, and decreased expression of p21 is linked to poor prognosis in a number of carcinomas including gastric carcinoma, non-small cell lung carcinoma, and thyroid carcinoma. p21 is also associated with favourable prognosis in several tumours.

Specifications

Clone	IHC 021
Source	Mouse Monoclonal
Applications	IHC (P)
Formulation	Tris Buffer, pH 7.3 - 7.7, with 1% BSA and <0.1% Sodium Azide

IHC Procedure*

Positive Control Tissue	Colon
Concentrated Dilution	1:50 – 1:200
Pretreatment	Perform heat-induced epitope retrieval (HIER) at pH 9 for 10 to 30 minutes
Incubation Time and Temp	10 to 30 minutes at room temperature
Detection	Refer to the detection system manual

*Result should be confirmed by an established diagnostic procedure.

Storage and Handling

Must store the reagent at 2-8 °C. Do not freeze. Do not use the reagent after expiration date on vial. To ensure proper stability and delivery of the antibody after each run, replace the cap and immediately place the bottle in a refrigerator in an upright position. Positive and negative controls should be simultaneously run with unknown specimens, as there are no conclusive characteristics to suggest instability of the antibody.

Precautions

The product is for research use only. Do not use for diagnosis purpose. Ensure proper handling procedures are used with all reagents. Always wear laboratory coats, disposable gloves, and other appropriate laboratory equipment when handling reagents. Do not ingest reagents, and avoid contact with eyes and mucous membranes. Wash eyes with copious amounts of water if contact occurs.

References

1. **Winters ZE**, et al. "Subcellular localisation of cyclin B, Cdc2 and p21(WAF1/CIP1) in breast cancer. association with prognosis." *Eur J Cancer*. 2001 Dec;37(18):2405-12.
2. **Zhou BP**, et al. "Cytoplasmic localization of p21Cip1/WAF1 by Akt-induced phosphorylation in HER-2/neu-overexpressing cells." *Nat Cell Biol*. 2001 Mar;3(3):245-52.
3. **Winters ZE**, et al. "Cytoplasmic p21WAF1/CIP1 expression is correlated with HER-2/ neu in breast cancer and is an independent predictor of prognosis." *Breast Cancer Res*. 2003;5(6):R242-9. Epub 2003 Oct 3.
4. **Dolezalova D**, et al. "MicroRNAs regulate p21(Waf1/Cip1) protein expression and the DNA damage response in human embryonic stem cells." *Stem Cells*. 2012 Jul;30(7):1362-72. doi: 10.1002/stem.1108.
5. **Almond JB**, et al. "The proteasome: a novel target for cancer chemotherapy." *Leukemia*. 2002 Apr;16(4):433-43.
6. **Gartel AL**, et al. "Lost in transcription: p21 repression, mechanisms, and consequences." *Cancer Res*. 2005 May 15;65(10):3980-5.
7. **Tamura M**, et al. "Prognostic significance of p21 protein expression in patients with pulmonary squamous cell carcinoma following induction chemotherapy." *Ann Thorac Cardiovasc Surg*. 2007 Feb;13(1):9-14.

Technical Support

Contact FemtoPath Technical Support at +886232338585 or email to femtopath@hongjing.com.tw for questions regarding this product.