Mouse (monoclonal) Anti-Phosphotyrosine Unconjugated

PRODUCT ANALYSIS SHEET

Catalog Number:	AHO0681
Lot Number:	See product label
Quantity/Volume:	0.2 mg/0.2 mL
Clone Number:	PY20
Isotype:	IgG2b
Form of the Antibody:	Purified immunoglobulin in 20 mM sodium phosphate, pH 7.5, 150 mM sodium chloride, 50% glycerol.
Preservation:	3 mM sodium azide (Caution: sodium azide is a poisonous and hazardous substance. Handle with care and dispose of properly.)
Purification:	This antibody was purified by immunoaffinity chromatography employing a matrix with immobilized phosphotyrosine.
Immunogen:	Phosphotyrosine coupled to carrier protein.
Myeloma/Fusion Partners:	Hybridoma derived from BALB/c mouse splenocytes.
Specificity:	Protein tyrosine phosphorylation has been the subject of intense investigation for over two decades. Tyrosine phosphorylation is catalyzed by members of the tyrosine kinase superfamily. To date, approximately 90 members of this superfamily have been identified in the human genome. Levels of phosphorylation of tyrosine residues within cellular proteins are observed to increase in response to growth factors, cytokines, insulin, extracellular matrix components, and other stimuli. Tyrosine phosphorylation has several effects, including the regulation of enzyme activity, as well as the localization of enzyme activity through the generation of docking sites for proteins bearing SH2 domains. This monoclonal antibody specifically recognizes phosphorylated tyrosine residues, and does not cross-react with phosphorylated threonine or phosphorylated serine residues. Please note that the binding of this monoclonal antibody to phosphorylated tyrosine residues is inhibited by divalent cations at concentrations greater than 1 mM and salt concentrations greater than 0.2 M.
Applications:	This monoclonal antibody is suitable for use in ELISA, Western blot analysis, immunohistochemistry, immunocytochemistry, and immunoprecipitation.
Suggested Working Dilutions:	The suggested working dilution for use in Western blotting or ELISA is 1:2,000. The suggested working dilution for use in immunohistochemistry, immunocytochemistry, or immunoprecipitation is 1:500. The optimal concentration should be determined for each specific application.

This product is for research use only. Not for use in diagnostic procedures.

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Storage: Store at –20°C. Upon initial thawing, apportion into working aliquots and store at –20°C. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody.

Expiration Date: Expires one year from date of receipt when stored as instructed.

References:

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Frackelton, R.A., Jr., A.H. Ross, and H.N. Eisen (1983) Characterization and use of monoclonal antibodies for isolation of phosphotyrosyl proteins from retrovirus-transformed and growth factor-stimulated cells. Mol. Cell. Biol. 3:1343-1352.

Glenney, J.R., Jr., L. Zokas, and M.P. Kamps (1988) Monoclonal antibodies to phosphotyrosine. J. Immunol. Meth. 109:277-285.

Hanissian, S.H. and N. Sahyoun (1992) Neuronal protein tyrosine kinases associated with synaptosomal glycoproteins. J. Neurosci. Res. 32(4):576-582.

Takagi, S., M. Daibata, T.J. Last, R.E. Humphreys, D.C. Parker, and T. Sairenji (1991) Intracellular localization of tyrosine kinase substrates beneath crosslinked surface immunoglobulins in B cells. J. Exp. Med. 174(2):381-388.

Tremblay, L. and R. Beliveau (1994) Tyrosine protein phosphorylation in plasma membranes of rat kidney cortex. Am. J. Physiol. 267(3 Pt 2):F415-F422.

Wang, J.Y.J. (1988) Antibodies for phosphotyrosine: Analytical and preparative tool for tyrosylphosphorylated protein. Anal. Biochem. 172:1-7.

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