

Product datasheet for **AM00199BT-S**

Phosphotyrosine Mouse Monoclonal Antibody [Clone ID: PY20]

Product data:

Product Type:	Primary Antibodies
Clone Name:	PY20
Applications:	ELISA, IHC, IP, WB
Recommended Dilution:	Suitable for use in Western Blot (1/5,000), ELISA (1/5,000), Immunocytochemistry (1/500) and Immunohistochemistry (1/500).
Reactivity:	Broad
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Hybridoma produced from Balb/C mice immunized with phosphotyrosine coupled to carrier protein.
Specificity:	This antibody specifically recognizes phosphorylated tyrosine residues and does not react with phosphorylated threonine or serine residues.
Formulation:	20 mM sodium phosphate, 150 mM Sodium Chloride, 50% glycerol at pH 7.5 and 3 mM Sodium Azide as preservative. Label: Biotin State: Liquid (sterile filtered) purified IgG fraction. Label: Coupled through free primary amino groups to The binding site of the antibody was protected by the addition of phenyl phosphate prior to coupling
Concentration:	lot specific
Purification:	Affinity purification on a column of immobilized phosphotyrosine.
Conjugation:	Biotin
Storage:	Store the antibody (undiluted) at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.



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Background:

The role of tyrosine phosphorylation in transduction of the mitogenic signal from transmembrane receptors and in transformation by oncogene tyrosine kinases has been the subject of intense investigation for several years. While the phosphorylation of specific tyrosine residues has been shown to be a primary mechanism of signal transduction during normal mitogenesis, cell cycle progression and oncogenic transformation, its role in other areas such as differentiation and gap junction communication, is a matter of active and ongoing research. Antibodies that specifically recognize phosphorylated tyrosine residues have proved to be invaluable to the study of tyrosine-phosphorylated protein biochemical pathways in which they function. The biotin conjugate of clone PY20 anti-phosphotyrosine is especially useful for the detection of phosphotyrosyl proteins in western blotting, immunohistochemical and immunocytochemical protocols in situations wherein the use of a secondary antibody would produce unacceptable background signals. In addition, the strength of the biotin-streptavidin interaction and the immense variety of streptavidin-coupled probes available make PY20-biotin a very versatile reagent.