Datasheet: MCA2472P

Description:	MOUSE ANTI PHOSPHOTYROSINE:HRP
Specificity:	PHOSPHOTYROSINE
Format:	HRP
Product Type:	Monoclonal Antibody
Clone:	PY20
Isotype:	IgG2b
Quantity:	0.5 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/1000 - 1/4000
Western Blotting			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species

Chemical

Product Form

Purified IgG conjugated to Horseradish Peroxidase (HRP) - liquid

Preparation

Purified IgG prepared by affinity chromatography.

Buffer Solution

Phosphate buffered saline

Preservative
0.01% Thiomersal
Stabilisers
50% Glycerol

Specificity

Mouse anti Phosphotyrosine antibody, clone PY20 recognizes phosphotyrosine, enabling the detection, characterisation and isolation of proteins containing phosphorylated tyrosine residues.

The phosphorylation of tyrosine acts as a important signal in the control of cell mitogenesis, differentiation, proliferation, and migration and occurs following the activation of intracellular tyrosine kinases, including the T-cell receptor (TCR), epidermal growth factor (EGF) and many families of receptor and non-receptor protein tyrosine kinases (PTKs), which catalyse the transfer of ATP to a tyrosine residue on specific cell protein targets.

The binding of PY20 to phosphorylated tyrosines can be inhibited by free phosphotyrosine and

	phenylphosphate, but not by free phosphate, phosphoserine or phosphothreonine. The affinity of PY20 for phosphotyrosine is 10^{-6} to 10^{-7} M.
References	1. Ruff-Jamison, S. *et al.* (1991) Heavy and light chain variable region sequences and antibody properties of anti-phosphotyrosine antibodies reveal both common and distinct features. J Biol Chem. 266 (10): 6607-13. 2. Takagi, S. *et al.* (1991) Intracellular localization of tyrosine kinase substrates beneath crosslinked surface immunoglobulins in B cells. J Exp Med. 174 (2): 381-8. 3. Glenney, J.R. Jr. *et al.* (1988) Monoclonal antibodies to phosphotyrosine. J Immunol Methods. 109 (2): 277-85. 4. Vendel,A.C. *et al.* (2009) B and T lymphocyte attenuator regulates B cell receptor signaling by targeting Syk and BLNK. J Immunol. 182: 1509-17.
Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation available at: Material Safety Datasheet Documentation #10097 available at: https://www.bio-rad-antibodies.com/uploads/MSDS/10097.pdf
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

AbGUARD® HRP STABILIZER PLUS (BUF052A)
AbGUARD® HRP STABILIZER PLUS (BUF052B)
AbGUARD® HRP STABILIZER PLUS (BUF052C)
TMB CORE (BUF056A)
TMB CORE PRESTAINED (BUF057A)
TMB CORE+ (BUF062A)
TMB SIGNAL+ (BUF054A)

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