

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
RRID	AB_567187

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.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10097 available at:
10097: <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+ \(BUF062A\)](#)

[TMB SIGNAL+ \(BUF054A\)](#)

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