ALPHA DIAGNOSTIC INTERNATIONAL

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Product Specification Sheet

□ **Cat.** PTYR11-A	Rabbit anti-Phosphotyrosine IgG, aff pure	**SIZE**: 100 ug
□ **Cat.** PTYR11-S	Rabbit Anti-Phosphotyrosine antiserum	**SIZE**: 100 ul

Protein phosphorylation and dephosphorylation reactions is a key postranslational event in the modification of protein functions. Protein phosphorylation occurs at tyrosine, serine, or threonine (p-tyr, p-ser, or p-thr) residues. Many different mitogenic systems, such as the EGF, PDGF, and insulin receptor systems contain tyr/ser/thr kinase domains which autophosphorylate specific tyr, ser or thr residues upon binding of their ligands. T cell antigen receptor complex or the receptors for some hemopoietic growth factors may stimulate associated kinases, and cells transformed by viral oncogenes contain elevated levels of phosphorylated proteins. An understanding of transformation by oncogenes and mitogenic processes of growth factors requires a delineation of all potential partners involved in phosphorylation cascade. The availability of antibodies specific for p-tyr, p-thr or p-thr residues has greatly advanced the studies on role of phosphorylated proteins.

Source of Antigen and Antibodies

Antigen	O-Phospho-L-tyrosine-conjugated to KLH
Ab Host/type	Rabbit anti-phosphorylation IgG, designated as # PTYR11-A, Protein A/G purified IgG supplied in PBS+50% glycerol and 0.05% azide
2-Ab	**Goat Anti-rabbit IgG-HRP conjugate** Cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control IgG	Cat # 20009-1, Rabbit (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as –ve control

Form & Storage of Antibodies

Antiserum (unpurified)
□ 100ul □ solution □ lyophilized powder
Supplied in Buffer: 0.05% azide
Reconstitute powder in 100 ul PBS

Affinity pure IgG
□ 100 ug/100ul □ solution □ lyophilized powder
Supplied in **Buffer**: PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Storage
Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC.

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting (1:1K-5K for neat serum and 1-10 ug/ml for affinity pure antibody using ECL technique).

ELISA: Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (1:10-50K for neat serum and 0.5-1 ug/ml for affinity pure).

Histochemistry & Immunofluorescence: Not tested. We recommend the use of affinity purified IgG at 5-20 ug/ml.

Specificity & Cross-reactivity

Rabbit Anti-Phosphotyrosine (#PTYR11-A) reacts with phosphorylated tyrosine both as free amino acid or when conjugated to carriers such as BSA or KLH using ELISA and dot blot. No significant reactivity is observed with nonphosphorylated tyrsoine, phosphorylated serine or threonine, AMP, or ATP. The antibody may be used for the immunolocalization of most phosphotyrosine containing proteins using western or IHC. However, some proteins phosphorylated at serine may not be recognized by this antibody due to steric hindrance of the recognition site.

General References: (1) Hunter, T. (1985) Annu. Rev. Biochem., 54, 897; Heffetz, D. (1991) Enzymol., 201, 44; Alexander, D.et al (1989) Immunol. Today, 10, 200; Levine, L., et al., (1989) J. Immunol. Methods, 124, 239

*This product is for *in vitro* research use only.

Related material available from ADI:

Catalog	Prod Description
PTYR11-A	Anti-Phosphotyrosine IgG, aff pure
PTYR11-S	Rabbit Anti-Phosphotyrosine antiserum
PTYR12-BTN	Monoclonal Anti-Phosphotyrosine (PY20) IgG-Biotin conjugate
PTYR12-HRP	Monoclonal Anti-Phosphotyrosine (PY20) IgG-HRP conjugate
PTYR12-M	Monoclonal Anti-Phosphotyrosine (PY20) IgG, aff pure
PTYR15-N	Phosphotyrosine-BSA conjugate (blocking antigen) for ELISA, Western

Western Blot recycling kit (Use the same blot to probe with multiple antibodies CSP11, CLO11, etc.) **recycle blot at room temp in 5-10 min**; No mercaptoethanol or heating required).

PTYR11-A-phosphotyrosine 151109SV

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