

## Product datasheet for **AP03037HR-N**

### Phosphotyrosine Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	<b>Western blot (7).</b>
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Phosphotyrosine conjugated to KLH
Specificity:	This antibody recognizes proteins and peptides that contain phosphorylated Tyrosine residues. Does not cross-react with Phosphoserine or Threonine.
Formulation:	PBS Label: HRP State: Aff - Purified State: Liquid purified Ig fraction Stabilizer: 50% Glycerol Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Purification:	Affinity Chromatography
Conjugation:	HRP
Storage:	Store 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.



[View online »](#)

**Background:**

Protein phosphorylation is an important posttranslational modification that serves many key functions to regulate a protein's activity, localization, and protein-protein interactions. Phosphorylation is catalyzed by various specific protein kinases, which involves removing a phosphate group from ATP and covalently attaching it to a recipient protein that acts as a substrate. Most kinases act on both serine and threonine; others act on tyrosine, and a number (dual specificity kinases) act on all three. Because phosphorylation can occur at multiple sites on any given protein, it can therefore change the function or localization of that protein at any time (1).

Changing the function of these proteins has been linked to a number of diseases, including cancer, diabetes, heart disease, inflammation and neurological disorders (2-4).

In particular, the phosphorylation of tyrosine is considered one of the key steps in signal transduction and regulation of enzymatic activity (5). Phosphotyrosine can be detected through specific antibodies, and are helpful in facilitating the identification of tyrosine kinase substrates (6).