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## Pim Kinase Antibody Sampler Kit



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1 Kit (5 x 20 microliters)

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Pim-1 (C93F2) Rabbit mAb	3247	20 µl	34 kDa	Rabbit IgG
Pim-2 (D1D2) Rabbit mAb	4730	20 µl	40, 38, 34 kDa	Rabbit
Pim-3 (D17C9) Rabbit mAb	4165	20 µl	35 kDa	Rabbit IgG
Phospho-Bad (Ser112) (40A9) Rabbit mAb	5284	20 µl	23 kDa	Rabbit IgG
Bad (D24A9) Rabbit mAb	9239	20 µl	23 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit [cellsignal.com](http://cellsignal.com) for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

### Description

The Pim Kinase Antibody Sampler Kit provides an economical means to detect all three Pim kinases along with Bad and Phospho-Bad (Ser112). The kit contains enough primary and secondary antibody to perform two western blot experiments.

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Background

Pim proteins (Pim-1, Pim-2 and Pim-3) are oncogene-encoded serine/threonine kinases (1). Pim-1, a serine/threonine kinase highly expressed in hematopoietic cells, plays a critical role in the transduction of mitogenic signals and is rapidly induced by a variety of growth factors and cytokines (1-4). Pim-1 cooperates with c-Myc in lymphoid cell transformation and protects cells from growth factor withdrawal and genotoxic stress-induced apoptosis (5,6). Pim-1 also enhances the transcriptional activity of c-Myb through direct phosphorylation within the c-Myb DNA binding domain as well as phosphorylation of the transcriptional coactivator p100 (7,8). Hypermutations of the Pim-1 gene are found in B-cell diffuse large cell lymphomas (9). Phosphorylation of Pim-1 at Tyr218 by Etk occurs following IL-6 stimulation and correlates with an increase in Pim-1 activity (10). Various Pim substrates have been identified; Bad is phosphorylated by both Pim-1 and Pim-2 at Ser112 and this phosphorylation reverses Bad-induced cell apoptosis (11,12).

The corresponding pim-1 gene encodes a pair of proteins through use of different translation initiation sites. Both larger 44 kDa (Pim-1L) and smaller 33 kDa (Pim-1S) proteins are active kinases, but differ in stability (13).

### Background References

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