



## Biotinylated Anti-human PYK2/FAK2 Antibody

### ORDERING INFORMATION

**Catalog Number:** BAF4589

**Lot Number:** CDME01

**Size:** 50 µg

**Formulation:** 0.2 µm filtered solution in PBS with BSA

**Storage:** -20° C

**Reconstitution:** sterile 0.1% BSA in TBS

**Specificity:** human PYK2

**Immunogen:** *E. coli*-derived rhPYK2 (aa 221 - 411)

**Ig Type:** sheep IgG

**Application:** Western blot

### Background

PYK2 (Proline-rich tyrosine kinase 2; also FAK2, RAFTK and CAKβ) is a 112 - 116 kDa member of the FAK subfamily, tyrosine protein kinase family. It is expressed in multiple cell types, including endothelial cells, vascular smooth muscle cells, megakaryocytes and neurons. PYK2 is activated by elevated intracellular Ca<sup>++</sup> and is associated with MAPK pathway activation. Human PYK2 is 1009 amino acids (aa) in length. It contains one FERM domain that binds to growth factor receptors (aa 39 - 359), a protein kinase domain (aa 425 - 683), two Pro-rich segments that bind SH domains (aa 702 - 767 and 831 - 869), and one FAT region that interacts with integrins (aa 868 - 1009). Phosphorylation of PYK2 at Tyr402/579/580 is associated with changes in activity. There is one splice variant that shows a deletion of aa 739 - 780.

### Preparation

Produced in sheep immunized with purified, *E. coli*-derived, recombinant human PYK2 (rhPYK2; aa 221 - 411; Accession # Q14289). Human PYK2 specific IgG was purified by human PYK2 affinity chromatography and then biotinylated.

### Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

### Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

### Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a **manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

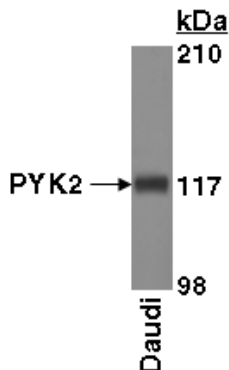
### Specificity

This antibody has been selected for use as a detection antibody in human PYK2 Western blots.

### Application

**Western blot** - An antibody concentration of 1.0 µg/mL is recommended.

**Optimal dilutions should be determined by each laboratory for each application.**



### Detection of PYK2 with BAF4589.

Cell lysates were resolved by SDS-PAGE, transferred to an Immobilon-P membrane and immunoblotted with 1.0 µg/mL biotinylated sheep anti-hPYK2.