

DESCRIPTION

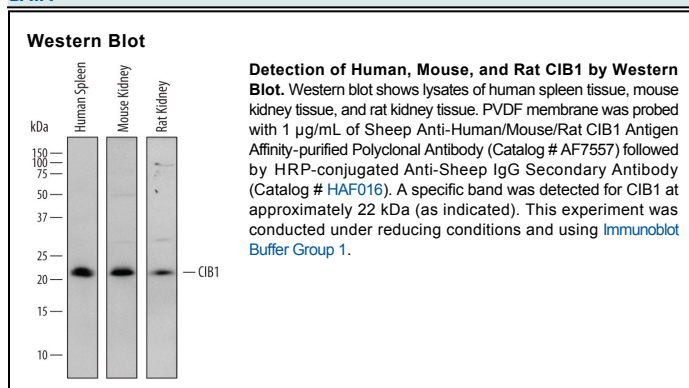
| | |
|---------------------------|---|
| Species Reactivity | Human/Mouse/Rat |
| Specificity | Detects human, mouse, and rat CIB1 in Western blots. |
| Source | Polyclonal Sheep IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived recombinant human CIB1 Gly2-Leu191 Accession # Q99828 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|---------------------|---------------------------|-----------|
| Western Blot | 1 µg/mL | See Below |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Sterile PBS to a final concentration of 0.2 mg/mL. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

CIB1 (Calcium and Integrin-Binding protein 1; also calmyrin, KIP and CIBP) is a 22-23 kDa, Ca⁺⁺-binding member of the CIB family of proteins. It is widely expressed, being found in neurons, platelets/megakaryocytes, skeletal muscle myocytes and lymphocytes. CIB1 is associated with the cytosolic side of the plasma membrane, and has multiple binding partners, including InsP₃R, GPIIb/αIIb, presenilin 2, and NBR1 plus FEZ. When CIB1 binds InsP₃R, this ER-embedded receptor is both activated, and later desensitized to subsequent ligand binding. Relative to GPIIb, CIB1 interaction with the αIIbβ₃ integrin on platelets following thrombin exposure appears to inhibit integrin activation, thus providing a tight control on subsequent platelet binding to fibrinogen. Human CIB1 is 191 amino acids (aa) in length. It contains a utilized myristoylation site at Gly2, followed by two EF-hand domains (aa 103-183). CIB1 is suggested to act as a monomer. There is at least one potential isoform variant that shows a 40 aa insertion after Lys29. Full-length human CIB1 (aa 1-191) shares 94% aa sequence identity with mouse CIB1.