Integrin β1 Antibody

**Background:** Integrins are α/β heterodimeric cell surface receptors that play a pivotal role in cell adhesion and migration, as well as in growth and survival (1,2). The integrin family contains at least 16 α and 8 β subunits that form 24 known integrins with distinct tissue distribution and overlapping ligand specificities (3). Integrins not only transmit signals to cells in response to the extracellular environment (outside-in signaling), but also sense intracellular cues to alter their interaction with extracellular environment (inside-out signaling) (1,2).

The β1 subfamily includes 12 distinct integrin proteins that bind to different extracellular matrix molecules (4). Control of extracellular integrin binding influences cell adhesion and migration, while intracellular signaling messages relayed by the β1 cytoplasmic tail helps to regulate cell proliferation, cytoskeletal reorganization and gene expression (4). β1 integrin is implicated in various activities including embryonic development, blood vessel, skin, bone and muscle formation, as well as tumor metastasis and angiogenesis (4,5).

**Specificity/Sensitivity:** Integrin β1 Antibody detects endogenous levels of total integrin β1 protein.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro680 of human integrin β1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background References:**

**Applications and Species Cross-Reactivity**

<table>
<thead>
<tr>
<th>Applications</th>
<th>Species Cross-Reactivity</th>
<th>Molecular Wt.</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>W Endogenous</td>
<td>H, M, R, Mk</td>
<td>115, 135 kDa</td>
<td>Rabbit **</td>
</tr>
</tbody>
</table>

**Western blot analysis of extracts from various cell types using Integrin β1 Antibody.**

**Recommended Antibody Dilutions:**
Western blotting 1:1000

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

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.**

**Recommended Antibody Dilutions:**
Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.