

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human KLF2 in direct ELISAs. In direct ELISAs, less than 10% cross-reactivity with recombinant human (rh) KLF17 and no cross-reactivity with rhKLF1, 4, 5, 6, 10, 12, 17, recombinant mouse KLF4 or 15 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 665333
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human KLF2 Pro71-Pro168 (predicted) Accession # Q9Y5W3
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below
<b>Intracellular Staining by Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

**DATA**

<p><b>Immunocytochemistry</b></p> <p><b>KLF2 in BG01V Human Cells.</b> KLF2 was detected in immersion fixed BG01V human embryonic stem cells using Human KLF2 Monoclonal Antibody (Catalog # MAB5466) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>	<p><b>Intracellular Staining by Flow Cytometry</b></p> <p><b>Detection of KLF2 in BG01V Human Cells by Flow Cytometry.</b> BG01V human embryonic stem cells were stained with Mouse Anti-Human KLF2 Monoclonal Antibody (Catalog # MAB5466, filled histogram) or isotype control antibody (Catalog # MAB0041, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.</p>
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**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

KLF2 (Kruppel-like factor 2; also LKLF) is a lung-associated, 37 kDa member of the Kruppel C2H2-type zinc-finger protein family. KLF2 is found in airway epithelium, endothelium, monocytes, T and B cells. It is a transcription factor that regulates multiple genes, many of which are involved in cell migration. Human KLF2 is 355 amino acids (aa) in length. It contains an activation domain (aa 1-110), an inhibitory domain (aa 111-267), and three C2H2-type zinc-finger regions (aa 272-354). There is one potential splice form that shows a premature truncation after Asp224. Over aa 71-168, human KLF2 is 82% aa identical to mouse KLF2.