

## DESCRIPTION

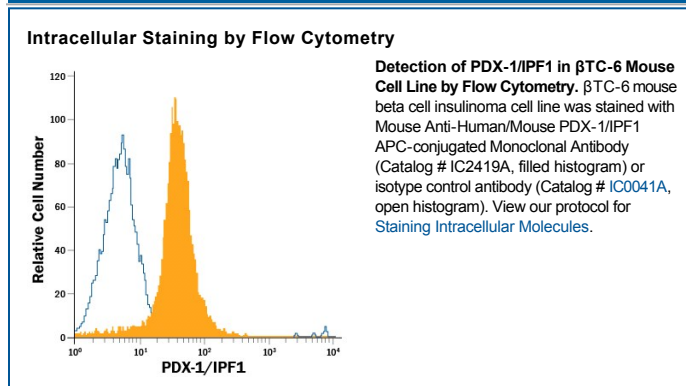
<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse PDX-1 in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 267712
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PDX-1 Ala91-Arg283 Accession # P52945
<b>Conjugate</b>	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
<b>Formulation</b>	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## 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
Intracellular Staining by Flow Cytometry	10 µL/10 <sup>6</sup> cells	See Below

## DATA



## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## BACKGROUND

PDX-1 (Pancreatic-duodenal Homeobox Factor-1), also known as IDX-1 and STF-1 is a 31 kDa member of the IPF-1 (Insulin Promoter Factor) subfamily, Antp (antennapedia) family of molecules. Human PDX-1 is 283 amino acids (aa) in length, and although its predicted MW is approximately 30 kDa, it runs anomalously in SDS-PAGE at 40-46 kDa. PDX-1 possesses one transactivation domain (aa 13-73) and one DNA-binding homeodomain (aa 146-205) that contains an NLS between aa 197-203. Phosphorylation is known to occur on Ser61 and Ser269, and methylation is found on Lys131. PDX-1 drives the development of the embryonic pancreas, and post-natally it is found in both β- and δ (somatostatin) islet cells. This transcription factor complexes with multiple cofactors (Set9; NeuroD1; MafA; HMGA1) in its regulation of β-cell division and insulin synthesis, and serves principally as an RNA pol II binding modulator. Over aa 91-283, human and mouse PDX-1 share 87% aa sequence identity.