Pancreatic duodenal homeobox-1 protein (PDX1) Antibody

Mouse Monoclonal Antibody [Clone PCRP-PDX1-2C11]

Catalog No	Format	Size
3651-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3651-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3651-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

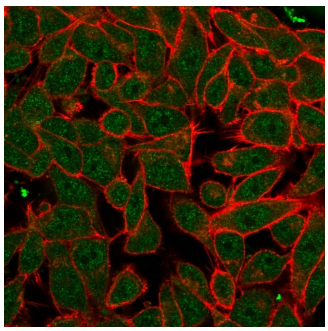
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	

Product Details

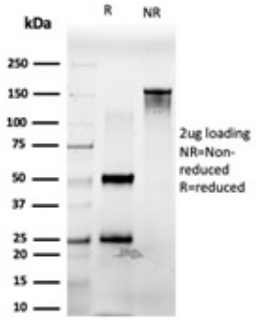
Clone	PCRP-PDX1-2C11
Gene Name	PDX1
Immunogen	Recombinant full-length human PDX1 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2c
Mol. Weight of Antigen	46kDa
Cellular Localization	Cytoplasm, Cytosol, Nucleus
Species Reactivity	Human
Positive Control	HeLa or HEK293 cells.

**Optimal dilution for a specific application should be determined.*

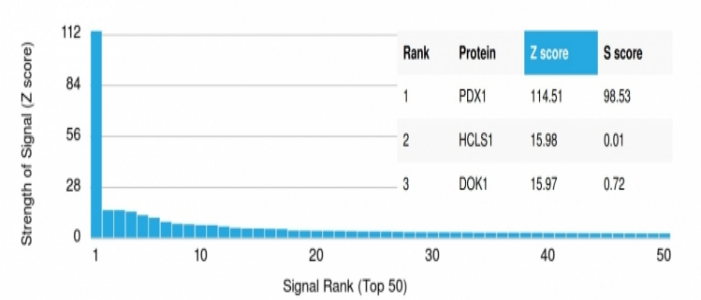
Product Images for Pancreatic duodenal homeobox-1 protein (PDX1) Antibody



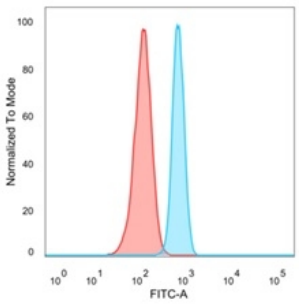
Immunofluorescence Analysis of PFA-fixed HeLa cells. PDX1 Mouse Monoclonal Antibody (PCRP-PDX1-2C11) followed by goat anti-mouse IgG-CF488 (green); phalloidin counterstain (red).



SDS-PAGE Analysis of Purified PDX1 Mouse Monoclonal Antibody (PCRP-PDX1-2C11). Confirmation of Purity and Integrity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteinsusing PDX1 Mouse Monoclonal Antibody (PCRP-PDX1-2C11). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Flow Cytometric Analysis of PFA-fixed HeLa cells. PDX1 Mouse Monoclonal Antibody (PCRP-PDX1-2C11) followed by goat anti-mouse IgG-CF488 (blue); unstained cells (red).

Specificity & Comments

Pancreatic duodenal homeobox-1 protein (PDX-1), also designated Insulin promoter factor (IPF1), Insulin upstream factor 1 (IUF1), somatostatin transactivating factor-1 (STF-1) and glucose-sensitive factor (GSF), is a 282 amino acid homeodomain-containing transcription factor present in pancreatic ?-cells. PDX-1 is a key regulator of pancreatic islet development and Insulin gene transcription in ?-cells. PDX-1 is expressed in all cells at the early stages of development and is mainly restricted to the pancreas and duodenum in adult. HNF-3?, HNF-1? and SP1 positively regulate the PDX-1 enhancer element. PDX-1 is also regulated by Glucagon-like peptide through activation of adenylyl cyclase, which results in an increase in intracellular cAMP activity. The increased levels of cAMP, and the resulting activation of PKA, lead to an increase in PDX-1 transcription and translocation of the protein to the nuclei of ?-cells. PDX-1 binds to the sequence C(C/T) and can heterodimerize with PBX. PDX-1 is phosphorylated by the SAPK2 pathway under high glucose concentrations. Mutations in the PDX-1 gene can cause maturity-onset diabetes of the young and pancreatic agenesis. The gene which encodes PDX-1 maps to human chromosome 13q12.2.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular, Developmental Biology, Nuclear Marker, Stem Cell Differentiation

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.