

Materials List for:

Staining Protocols for Human Pancreatic Islets

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Materials

Name	Company	Catalog Number	Comments
30% Hydrogen Peroxide (H ₂ O ₂)	Fisher Scientific	H325-500	Endogenous peroxidase blocking
ABC-Alkaline Phosphatase (AP)	Vector Laboratories	AK-5000	AP conjugate
Antibody Diluent	Invitrogen	003218	Primary antibody
Avidin blocker	Vector Laboratories	SP-2001	Block endogenous biotin
Biotinylated Goat anti-guinea pig	Vector Laboratories	BA-7000	Secondary antibody
Bluing Reagent	Fisher Scientific	7301	Leica autostainer
Citrate buffer, pH 6.0	BioGenex	HK086-9K	Antigen retrieval
Clarifier 1	Fisher Scientific	7401	Leica autostainer
Cytoseal XYL	Fisher Scientific	8312-4	Coverslip mountant
DAB	Vector Laboratories	SK-4100	HRP chromogen
DEEB	Dako	S2003	Endogenous AP blocking reagent
Eosin Y Alcoholic	Fisher Scientific	71204	Leica autostainer
Ethanol- 100%, 95%, 90%, 70%	Fisher Scientific	Various	Deparaffinization and coverslipping
Hematoxylin	Dako	S3301	Dako autostainer
Hematoxylin 7211	Fisher Scientific	7211	Leica autostainer
IgG (all host species for primary antibodies)	Various	Various	Negative controls for primaries
Liquid Permanent Red (LPR)	Dako	K0640	AP chromogen
Mach2 AP	Biocare Medical	MALP521L	Goat anti-Mouse AP conjugate
Mach2 HRP	Biocare Medical	MHRP520L	Goat anti-Mouse HRP conjugate
Mach2 HRP	Biocare Medical	RHRP520L	Goat anti-Mouse HRP conjugate
Methanol	Fisher Scientific	Various	H ₂ O ₂ diluent
Normal goat serum	Vector Laboratories	S-1000	IHC blocking reagent
Sniper	Biocare Medical	BS966M	IHC blocking reagent
TBST 20X	Thermo Fisher Scientific, Inc.	TA-999-TT	IHC buffer
Triology 20x	Cell Marque	920P-06	Antigen Retrieval
Xylene	Fisher Scientific	Various	Deparaffinization and coverslipping

Table 1. Specific reagents.

Name	Company	Catalog Number	Comments
Paraffin			
Amylase	Santa Cruz Biotechnology, Inc.	SC-46657	Mouse
Amylin	Serotec	MCA11267	Mouse
Carbonic anhydrase 19.9	Abcam	ab15146	Mouse
Caspase-3, cleaved	Cell Signaling Technology	9961	Rabbit
CD20	Dako	M0755	Mouse

CD3	Dako	A0452	Rabbit
CD34	Cell Signaling Technology	3569	Mouse
CD4	Dako	M7310	Mouse
CD45	Dako	M0754	Mouse
CD68	Dako	M0876	Mouse
CD8	Dako	M7103	Mouse
Chromogranin A	Dako	A0430	Rabbit
CK17	Dako	M7046	Mouse
CK19	Dako	M0772	Mouse
CK7	Dako	M7018	Mouse
C-peptide	Cell Signaling Technology	4593	Rabbit
Foxp3	e Bioscience	14-4776-80	Rat
Ghrelin	Santa Cruz Biotechnology, Inc.	SC-10386	Goat
Ghrelin	Abcam	ab85104	Rabbit
Glucagon	Dako	A0565	Rabbit
Glucagon	Abcam	ab10988	Mouse
Glucagon	Bachem	T-5037	Guinea Pig
Glut-1	Abcam	ab40084	Mouse
Glut-2	Santa Cruz Biotechnology, Inc.	SC-9117	Rabbit
Insulin	Dako	A0564	Guinea Pig
Ki-67	Dako	M7240	Mouse
Mafa	Novus Biological	NB400-137A	Rabbit
Pancreatic polypeptide	Invitrogen	18-0043	Rabbit
Pdx-1	Abcam	ab47308	Guinea Pig
Proinsulin	Novocastra	NCL-proin-1G4	Mouse
Proinsulin	Developmental Studies Hybridoma Bank	GS-9A8	Mouse
Secretagogin	Sigma-Aldrich	HPA 006641	Rabbit
Smooth muscle actin	Abcam	ab5694	Rabbit
Somatostatin	Dako	A0566	Rabbit
Synaptophysin	Dako	M0776	Mouse
Fresh Frozen			
CD11b	Abcam	ab6332	Rat
CD11c	Serotec	AHP1226	Rabbit
CD25	Novus Biological	NB 600-564	Mouse
CD94	Abcam	ab61874	Mouse
GAD65	Santa Cruz Biotechnology, Inc.	SC-130569	Mouse
HLA-ABC	Dako	M0736	Mouse

Table 2. Primary antibodies.

Name	Company	Catalog Number	Comments
Aperio Scanscope CS	Aperio Technologies		Digital slide scanner
DAKO Autostainer Plus	Dako		IHC stains
Label Matrix printing software	BioCarta	LM7UP57	Slide label software
Leica XL Autostainer	Leica Microsystems		H&E stains
Premium Coverglass	Fisher Scientific	12-548-5J	Coverslip
Spectrum Information Manager	Aperio Technologies		Scanner software

Superfrost Plus slides	Fisher Scientific	12-550-15	Positively charged slides
Vegetable steamer	Black and Decker	Various	Antigen retrieval
Zebra TLP 3742	CDWG	TLP3742	Slide label printer

Table 3. Specific supplies and equipment.