

Molecular and Immunologic Techniques in a Genetically Engineered Mouse Model of Gastrointestinal Stromal Tumor

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jove.com/video/63853

Materials

Name	Company	Catalog Number	Comments
100 micron filter	EMSCO	1194-2360	
1x RBC lysis buffer	Life Technologies	00-4333-57	
3mL syringe	Thermo Fisher Scientific/BD Biosciences	14823435	
4–15% Mini-PROTEAN TGX Precast Protein Gels, 10-well, 30 µl	Bio-Rad	4561083	
4% Paraformaldehyde Solution	Thermo Fisher Scientific	AAJ19943K2	
40 micron filter	EMSCO	1194-2340	
5M NaCl	Sigma Aldrich	S6546	
70 micron filter	EMSCO	1194-2350	
AKT antibody (C67E7)	Cell Signaling	4691	
C57BL/6J mice	The Jackson Laboratory		
Collagenase IV	Sigma Aldrich	C5138	
Complete mini edta free protease inhibitor	Thomas Scientific	C852A34	
Countess II Automated Cell Counter	Thermo Fisher Scientific		
Disposable Scalpels	Thermo Fisher Scientific/Exel International	14-840-00	
Dnase I	Thomas Scientific	C756V81	
Dog1 antibody	abcam	ab64085	
EDTA	Sigma Aldrich	E9884	
ERK antibody (p44/42)	Cell Signaling	9102	
FBS	Thomas Scientific	C788U23	
FIJI software	FIJI		https://imagej.net/software/fiji
Fisherbrand 850 Homogenizer	Thermo Fisher Scientific	15-340-169	
HBSS	University of Pennsylvania Cell Center		

Imatinib mesylate	Selleck Chemicals	S1026	
KIT antibody (D13A2)	Cell Signaling	3074	
KitV558Δ/+ Genotyping	Transnetyx		
Microcentrifuge tubes (1.5mL)	Thermo Fisher Scientific	05-408-129	
Mouse on Mouse Immunodetection Kit, Basic	Vector Laboratories	BMK-2202	
Nitrocellulose Membrane, Precut, 0.45 μm	Rio-Rad	1620145	
Nonfat Dry Milk	Thermo Fisher Scientific	NC9121673	
Nonidet P 40 Substitute	Sigma Aldrich	74385	
p-AKT antibody (S473)	Cell Signaling	4060	
p-ERK antibody (p44/42)	Cell Signaling	9101	
p-KIT antibody (Y719)	Cell Signaling	3391	
PMSF Protease Inhibitor	Thermo Fisher Scientific	36978	
Proteinase K	Thermo Fisher Scientific	BP170050	
Round-Bottom Polystyrene Test (FACS) Tubes	Falcon/Thermo Fisher Scientific	14-959-2A	
RPMI	University of Pennsylvania Cell Center		
Sodium fluoride (NaF)	Sigma Aldrich	201154	
Sodium orthovanadate (Na ₃ VO ₄)	Sigma Aldrich	S6508	
SuperSignal West Dura Extended Duration Substrate	Thermo Fisher Scientific	34076	
TBS buffer (10x)	University of Pennsylvania Cell Center		
Tissue culture dish (100mm ²)	Thermo Fisher Scientific/Falcon	08-772E	
TrisHCL	Thermo Fisher Scientific	BP1757500	
Tween 20	Rio-Rad	1706531	
vivaCT 80 platform	Scanco medical		