

Materials List for:

RNA Interference-based Investigation of the Function of Heat Shock Protein 27 during Corneal Epithelial Wound Healing

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Materials

Name	Company	Catalog Number	Comments
Biological safety cabinet	CHC LAB Co.Ltd, Daejeon, Republic of Korea	CHC-777A2-06	Class II, Type A2
Stealth RNAi™ siRNA	Thermo Fisher Scientific, Inc., Waltham, MA		RNAi siRNA; scrambled control-siRNA and HSP27-specific siRNA
BEGM™	Lonza, Inc., Walkersville, MD	CC-3171, CC4175	Bronchial epithelium growth medium
Protease inhibitor	Sigma-Aldrich, Inc., St. Louis, MO	P8340 ,P7626	1 μM Pepstatin A, 1 μM Leupeptin, 0.1 μM Aprotinin
Bradford protein assay	Bio-Rad Laboratories, Hercules, CA	#500-0001	Bradford protein assay
Nitrocellulose filters	Amersham, Little Chalfont, UK	RPN3032D	Western blotting membrane
Non-phosphorylated HSP27	Abcam Inc., Cambridge, MA	ab12351	1:1,000 dilution (Total HSP27)
Phosphorylated HSP27 (Ser85)	Abcam Inc., Cambridge, MA	ab5594	1:1,000 dilution HSP27 was phosphorylated at Ser85
Lipofectamine® RNAiMAX reagent	Invitrogen, Carlsbad, CA	13-778-075	Transfection reagent
Phosphorylated Akt (Ser473)	Cell Signaling Technology, Danvers, MA	No. 4060	1:1,000 dilution Akt was phosphorylated at Ser473 (cell survival marker)
Non-phosphorylated Akt	Cell Signaling Technology, Danvers, MA	No. 4061	1:1,000 dilution (Total Akt)
Bcl-2-associated X protein	Cell Signaling Technology, Danvers, MA	No. 4062	1:1,000 (anti-apoptotic protein marker)
GAPDH	Santa Cruz Biotechnology, Santa Cruz, CA	No. 4063	1:1,000 loading control marker (house keeping gene)
Horseradish peroxidase-conjugated goat anti-rabbit antibodies	Thermo Fisher Scientific, Inc., Waltham, MA	NCI1460KR	1:10,000 dilution
OPTI-MEM	Invitrogen, Carlsbad, CA	31985	reduced serum medium for transfection
Image analysis software	Olympus, Inc., Tokyo, Japan	Image-Pro Plus 5.0	
Skimmed milk powder	Carl Roth GmbH + Co. KG, Karlstruhe, Germany	T145.2	
Tris	Amresco LCC, Inc. Solon, OH	No-0497	
Sodium Chloride	Amresco LCC, Inc. Solon, OH	No-0241	
Six well culture plate	Thermo Fisher Scientific, Inc., Waltham, MA	140675	35.00 mm diameter / well
24-well culuture dish	Thermo Fisher Scientific, Inc., Waltham, MA	142475	

Orbital shaker	N-Bioteck, Inc., Seoul, South Korea	NB1015	
Bovine serum albumin	Santa Cruz Biotechnology, Santa Cruz, CA	sc-2323	
BDFACSCanto™ II	BD Biosciences, Franklin Lakes, NJ		Flow cytometry
X-Ray Film	Kodak, Rochester, NY		Medical X-Ray Cassette with Green 400 Screen
western blotting luminol reagent	Santa Cruz Biotechnology, Santa Cruz, CA	sc-2048	
FITC Annexin V Apoptosis Detection Kit I	BD Biosciences, Franklin Lakes, NJ	556547	