Table S1. **Increased gene transcripts from HU133A**

Protein degradation	**7 Increase**
26S subunit, non-ATPase, 8 (PSMD8)	
Tissue inhibitor of metalloproteinase 3 (TIMP3)	
Lysosomal-associated membrane protein 1 (LAMP1)	
Lysosomal-associated membrane protein 2 (LAMP2)	
Ubiquitin carboxyl-terminal esterase L3	
SerpinB5	
β-site APP-cleaving enzyme 2 (BACE2)	
Chaperones	**3 Increase**
Heat shock 27 kD protein 3 (HSPB3)	
Heat shock 27 kD protein family, member 7 (HSPB7)	
Heat shock 70 kD protein 2 (HSPA2)	
Signaling molecules	**4 Increase**
IRS-2	
SH3BGRL3-like protein (SH3BGRL3)	
S100 calcium-binding protein P (S100P)	
stratifin	
Transcription factors/cofactors	**4 Increase**
Zinc finger DAZ interacting protein 1 (DZIP1)	
Kruppel-like factor 4 (gut)	
BarH-like homeobox 1 (BARX1)	
High mobility group AT-hook 2 (HMGA2), mRNA	
ECM and adhesion proteins	**4 Increase**
collagen, type IV, α6	
Podocalyxin-like (PODXL)	
Galectin 3	
Protocadherin 17 (PCDH17)	
Nuclear proteins/scaffold proteins	**1 Increase**
Karyopherin (importin) β3	
Hypothetical proteins	**8 Increase**

Vesicle trafficking	**6 Increase**
Coatomer protein complex, subunit ε (COPE)	
RAB31, member RAS oncogene family (RAB31)	
Small GTP-binding protein rab22b	
Centaurin-α2 protein	
Caveolin 1, caveolae protein, 22 kD (CAV1)	
Adaptor-related protein complex 1, σ2 subunit	
Kinases/phosphodiesterase	**3 Increase**
Serum-inducible kinase (SNK)	
Phosphodiesterase 2A, cGMP-stimulated (PDE2A)	
Ribosomal protein S6 kinase, 70 kD, polypeptide 2	
Cytoskeletal proteins	**6 Increase**
Capping protein (actin filament), gelsolin-like (CAPG)	
Epidermal growth factor receptor pathway substrate 8	
Tubulin, β polypeptide (TUBB)	
Cytokeratin 8	
Keratin 17 (KRT17)	
Tropomodulin 3 (ubiquitous) (TMOD3)	
Channel/receptors/ion pumps	**3 Increase**
FXYD domain-containing ion transport regulator 5	
KCNN4	
Chloride intracellular channel 3 (CLIC3)	
Metabollic proteins	**7 Increase**
Nicotinamide *N*-methyltransferase (NNMT)	
Cytidine deaminase (CDA)	
Pig12 (PIG12)	
Liver-type alkaline phosphatase (EC 3.1.3.1).	
hluPGFS	
Alanyl (membrane) aminopeptidase	
CGI-58 protein /NOSIP	

The genes required for clearance are listed in Fig. 2. The genes whose knockdown led to cell death are shown in gray.