

**Table S5.** Upregulated genes in the proteolysis GO terms during tail resorption. 60 genes were dramatically upregulated at S43. These genes mainly encode enzymes, including hydrolase, protease, and matrix metalloproteinase, and are consistent with rapid tissue resorption.

Gene ID	NR GI	NR ID	NR Description
1-2-c43575/1	823470855	XP_012424179.1	PREDICTED: TATA-binding protein-associated factor 2N isoform X2 [Taeniopygia guttata]
1-2-c43666/1	4249095	AAI13769.1	myosin heavy chain, partial [Rana catesbeiana]
1-2-c34981/1	4952510	AAH75571.1	HLA-B associated transcript 5 [Xenopus (Silurana) tropicalis]
1-2-c50028/1	847108531	XP_012814021.1	PREDICTED: STAM-binding protein isoform X1 [Xenopus (Silurana) tropicalis];gi847108535;ref XP_012814022.1  PREDICTED: STAM-binding protein isoform X1 [Xenopus (Silurana) tropicalis]
3-6-c14239/1	780154032	XP_011682115.1	PREDICTED: glutamic acid-rich protein-like [Strongylocentrotus purpuratus]
2-3-c20238/3	120538440	AAI29682.1	Unknown (protein for MGC.160365) [Xenopus laevis]
2-3-c29517/3	301614077	XP_002936515.1	PREDICTED: ubiquitin carboxyl-terminal hydrolase 4 [Xenopus (Silurana) tropicalis]
1-2-c43062/1	56270034	AAH87471.1	Htra1 protein [Xenopus laevis]
2-3-c76271/2	189441985	AAI67321.1	LOC100170459 protein [Xenopus (Silurana) tropicalis]
1-2-c19121/1	148231526	NP_001087077.1	E3 ubiquitin-protein ligase HACE1 [Xenopus laevis];gi82200059;sp Q6DCL5.1 HACE1_XENLA RecName: Full=E3 ubiquitin-protein ligase HACE1; AltName: Full=HECT domain and ankyrin repeat-containing E3 ubiquitin-protein ligase 1 [Xenopus laevis];gi50415848;gb AAH77993.1  Hace1-prov protein [Xenopus laevis]
2-3-c63455/2	847108531	XP_012814021.1	PREDICTED: STAM-binding protein isoform X1 [Xenopus (Silurana) tropicalis];gi847108535;ref XP_012814022.1  PREDICTED: STAM-binding protein isoform X1 [Xenopus (Silurana) tropicalis]
1-2-c38617/1	147901642	NP_001091305.1	matrix metalloproteinase-9TH precursor [Xenopus laevis];gi119709546;dbj BAF42673.1  matrix metalloproteinase-9TH [Xenopus laevis]
2-3-c43189/1	148237354	NP_001081970.1	cingulin [Xenopus laevis];gi6636514;gb AAF20208.1 AF207901_1 cingulin [Xenopus laevis]
1-2-c51308/10	847156920	XP_012824466.1	PREDICTED: myosin-4 [Xenopus (Silurana) tropicalis]
1-2-c38664/1	148235901	NP_001080371.1	elongation of very long chain fatty acids-like 1 [Xenopus laevis];gi27503186;gb AAH42304.1  Elovl1-prov protein [Xenopus laevis]
1-2-c19767/1	148222777	NP_001081720.1	protease, serine, 8 precursor [Xenopus laevis];gi2599504;gb AAB96905.1  serine protease [Xenopus laevis]
2-3-c62973/3	132424622	ABO32468.1	endothelin converting enzyme-1 [Xenopus laevis]
2-3-c47226/1	156717508	NP_001096294.1	tripeptidyl-peptidase 1 precursor [Xenopus (Silurana) tropicalis];gi134023873;gb AAI35588.1  LOC100124868 protein [Xenopus (Silurana) tropicalis]
1-2-c15452/2	147901642	NP_001091305.1	matrix metalloproteinase-9TH precursor [Xenopus laevis];gi119709546;dbj BAF42673.1  matrix metalloproteinase-9TH [Xenopus laevis]
2-3-c41773/1	148225652	NP_001088463.1	ubiquitin thioesterase zranb1-A [Xenopus laevis];gi82180146;sp Q5U595.1 ZRN1A_XENLA RecName: Full=Ubiquitin thioesterase zranb1-A; AltName: Full=Zinc finger Ran-binding domain-containing protein 1A;gi54311385;gb AAH84789.1  Zranb1-a protein [Xenopus laevis]
1-2-c51832/2	54020950	NP_001005720.1	legumain precursor [Xenopus (Silurana) tropicalis];gi49523231;gb AAH75316.1  legumain [Xenopus (Silurana) tropicalis]
2-3-c58087/1	147901642	NP_001091305.1	matrix metalloproteinase-9TH precursor [Xenopus laevis];gi119709546;dbj BAF42673.1  matrix metalloproteinase-9TH [Xenopus laevis]
1-2-c45335/1	156717508	NP_001096294.1	tripeptidyl-peptidase 1 precursor [Xenopus (Silurana) tropicalis];gi134023873;gb AAI35588.1  LOC100124868 protein [Xenopus (Silurana) tropicalis]
2-3-c26883/1	847108105	XP_012813879.1	PREDICTED: dipeptidyl peptidase 8 isoform X1 [Xenopus (Silurana) tropicalis]
1-2-c24732/1	148237346	NP_001084981.1	RNA-binding motif protein, X chromosome [Xenopus laevis];gi82236857;sp Q6HRQ4.1 RBMX_XENLA RecName: Full=RNA-binding motif protein, X chromosome; AltName: Full=Heterogeneous nuclear ribonucleoprotein G; Short=hnRNP G [Xenopus laevis];gi47682580;gb AAH70649.1  MGC82187 protein [Xenopus laevis]
1-2-c2547/4	148223661	NP_001086687.1	ubiquinol-cytochrome c reductase core protein II [Xenopus laevis];gi50418237;gb AAH77311.1  Uqcrc2 protein [Xenopus laevis]
1-2-c32693/1	847165172	XP_012826266.1	PREDICTED: matrix metalloproteinase-25 [Xenopus (Silurana) tropicalis]
1-2-c12883/1	301612173	XP_002935612.1	PREDICTED: 26S proteasome non-ATPase regulatory subunit 11 [Xenopus (Silurana) tropicalis];gi41059166;f sp F6XBL2.2 PSD11_XENTR RecName: Full=26S proteasome non-ATPase regulatory subunit 11; AltName: Full=26S proteasome regulatory subunit RPN6
1-2-c87121/1	54020950	NP_001005720.1	legumain precursor [Xenopus (Silurana) tropicalis];gi49523231;gb AAH75316.1  legumain [Xenopus (Silurana) tropicalis]
1-2-c50942/4	213625177	AAI69984.1	Complement factor B [Xenopus laevis]
1-2-c44265/1	669271014	XP_008627462.1	PREDICTED: phosphate-regulating neutral endopeptidase [Corvus brachyrhynchos];gi727005437;ref XP_010392798.1  PREDICTED: phosphate-regulating neutral endopeptidase [Corvus cornix cornix];gi676411760;gb KFO55745.1  Metalloendopeptidase PEX [Corvus brachyrhynchos]
1-2-c45883/1	558221238	XP_006135955.1	PREDICTED: cathepsin L1 -like [Palaemon sinensis]
1-2-c35572/1	113931624	NP_001039264.1	novel aldo-keto reductase family 1 c (akt1c) protein [Xenopus (Silurana) tropicalis];gi89272462;emb CAJ83089.1  novel aldo-keto reductase family 1 c (akt1c) protein [Xenopus (Silurana) tropicalis];gi157423623;gb AAI53677.1  novel aldo-keto reductase family 1 c (akt1c) protein [Xenopus (Silurana) tropicalis]
1-2-c36197/1	134085433	NP_001015975.1	cullin-3 [Xenopus (Silurana) tropicalis];gi254766448;sp A4IHP4.1 CUL3_XENTR RecName: Full=Cullin-3; Short=CUL-3;gi134023875;gb AAI35617.1  cul3 protein [Xenopus (Silurana) tropicalis]
2-3-c20888/1	213626825	AAI70192.1	Complement factor B [Xenopus laevis]
2-3-c81321/2	257051069	P23787.3	RecName: Full=Transitional endoplasmic reticulum ATPase; Short=TER ATPase; AltName: Full=15S Mg(2+)-ATPase p97 subunit; Short=p97; AltName: Full=Valosin-containing protein; Short=VCP [Xenopus laevis];gi28422362;gb AAH46949.1  Vcp-prov protein [Xenopus laevis]
2-3-c46272/1	187608155	NP_001120167.1	ubiquitin carboxyl-terminal hydrolase 48 [Xenopus (Silurana) tropicalis];gi166796872;gb AAI59175.1  LOC100145207 protein [Xenopus (Silurana) tropicalis]
1-2-c18576/1	301614077	XP_002936515.1	PREDICTED: ubiquitin carboxyl-terminal hydrolase 4 [Xenopus (Silurana) tropicalis]
1-2-c19242/4	847087076	XP_012816229.1	PREDICTED: cytosol aminopeptidase isoform X1 [Xenopus (Silurana) tropicalis]
1-2-c85622/1	148228853	NP_001081066.1	matriptase a [Xenopus laevis];gi49257232;gb AAH71077.1  St14-A-prov protein [Xenopus laevis]
1-2-c51922/5	148234658	NP_001080810.1	keratin, type I cytoskeletal 18-B [Xenopus laevis];gi82207929;sp Q7SY65.1 K118B_XENLA RecName: Full=Keratin, type I cytoskeletal 18-B; AltName: Full=Cyokeratin-18-B; Short=CK-18-B; AltName: Full=Keratin-18-B; Short=K18-B [Xenopus laevis];gi32766495;gb AAH54993.1  Krt18-prov protein [Xenopus laevis]
1-2-c19245/2	148228748	NP_001084691.1	leucine aminopeptidase 3 [Xenopus laevis];gi46249508;gb AAH68707.1  MGC81140 protein [Xenopus laevis]
1-2-c50141/1	147902934	NP_001079714.1	ubiquinol-cytochrome c reductase core protein I [Xenopus laevis];gi29351607;gb AAH49288.1  Uqcrc1 protein [Xenopus laevis]
1-2-c25522/1	847156920	XP_012824466.1	PREDICTED: myosin-4 [Xenopus (Silurana) tropicalis]
1-2-c33102/1	147902934	NP_001079714.1	ubiquinol-cytochrome c reductase core protein I [Xenopus laevis];gi29351607;gb AAH49288.1  Uqcrc1 protein [Xenopus laevis]
2-3-c29390/1	124504280	AAI28677.1	Mmp-9th protein [Xenopus laevis]
1-2-c52297/1	257051069	P23787.3	RecName: Full=Transitional endoplasmic reticulum ATPase; Short=TER ATPase; AltName: Full=15S Mg(2+)-ATPase p97 subunit; Short=p97; AltName: Full=Valosin-containing protein; Short=VCP [Xenopus laevis];gi28422362;gb AAH46949.1  Vcp-prov protein [Xenopus laevis]
1-2-c39392/1	89268944	CAJ81959.1	myosin X [Xenopus (Silurana) tropicalis]
2-3-c39049/1	--	--	--
1-2-c40238/1	148225152	NP_001079747.1	F-box/LRR-repeat protein 15 [Xenopus laevis];gi82187926;sp Q7S273.1 FXL15_XENLA RecName: Full=F-box/LRR-repeat protein 15 [Xenopus laevis];gi32450295;gb AAH53821.1  MGC64561 protein [Xenopus laevis]
1-2-c33717/1	147901642	NP_001091305.1	matrix metalloproteinase-9TH precursor [Xenopus laevis];gi119709546;dbj BAF42673.1  matrix metalloproteinase-9TH [Xenopus laevis]
1-2-c19308/2	56118680	NP_001080815.1	E3 ubiquitin-protein ligase RNF13 precursor [Xenopus (Silurana) tropicalis];gi84712742;ref XP_012818369.1  PREDICTED: E3 ubiquitin-protein ligase RNF13 isoform X1 [Xenopus (Silurana) tropicalis];gi51704075;gb AAH80893.1  ring finger protein 13 [Xenopus (Silurana) tropicalis]
2-3-c49598/1	213623754	AAI70178.1	Casp9-A protein [Xenopus laevis];gi213627647;gb AAI70180.1  Casp9-A protein [Xenopus laevis]
1-2-c34897/1	147906566	NP_001091172.1	uncharacterized protein LOC100036932 [Xenopus laevis];gi120538016;gb AAI29683.1  LOC100036932 protein [Xenopus laevis]
1-2-c24322/1	301608280	XP_002933705.1	PREDICTED: paraplegin [Xenopus (Silurana) tropicalis]
2-3-c60913/1	147901440	NP_001085061.1	F-box/LRR-repeat protein 5 [Xenopus laevis];gi82236774;sp Q6INS1.1 FBXL5_XENLA RecName: Full=F-box/LRR-repeat protein 5; AltName: Full=F-box and leucine-rich repeat protein 5 [Xenopus laevis];gi47940274;gb AAH7202.1  MGC81139 protein [Xenopus laevis]
2-3-c27424/1	59861981	AAH90369.1	LOC548400 protein, partial [Xenopus (Silurana) tropicalis]
1-2-c52192/7	148222777	NP_001081720.1	protease, serine, 8 precursor [Xenopus laevis];gi2599504;gb AAB96905.1  serine protease [Xenopus laevis]
2-3-c25918/1	120538440	AAI29682.1	Unknown (protein for MGC.160365) [Xenopus laevis]
1-2-c31270/2	213982845	NP_001135590.1	beta-secretase 2 precursor [Xenopus (Silurana) tropicalis];gi195540077;gb AAI68114.1  Unknown (protein for MGC.186115) [Xenopus (Silurana) tropicalis]