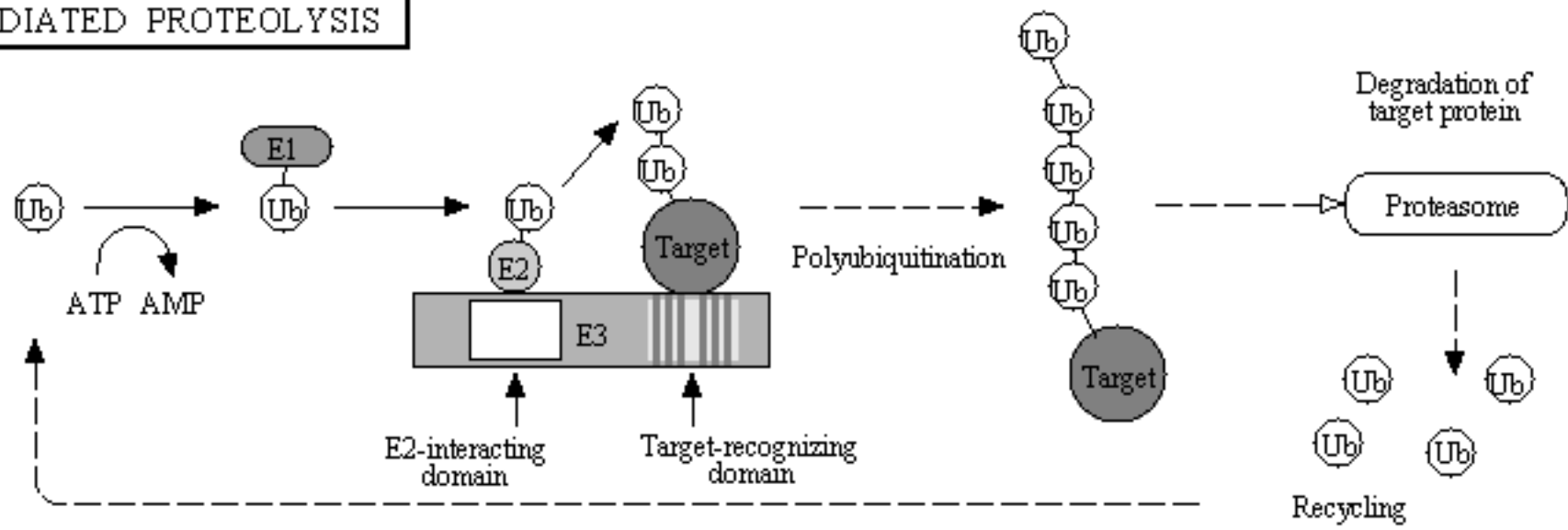


UBIQUITIN MEDIATED PROTEOLYSIS



E1
(Ubiquitin-activating enzyme)

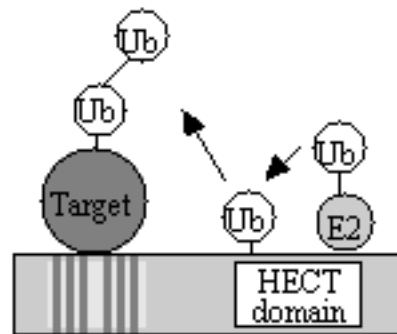
K03178...	K10684	K10685	K10686
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E2
(Ubiquitin-conjugating enzyme)

K10573	K10574	K06688	K06689	K10687	K10575	K04555	K10576
K10577	K10578	K04554	K04552	K04553	K10579	K10580	K10581
K10582	K02207	K10583	K10584	K10688	K10585	K04649	K10586

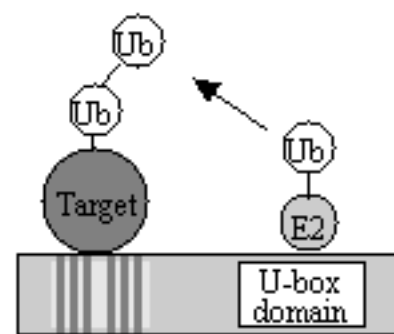
E3
(Ubiquitin ligase)

HECT type E3



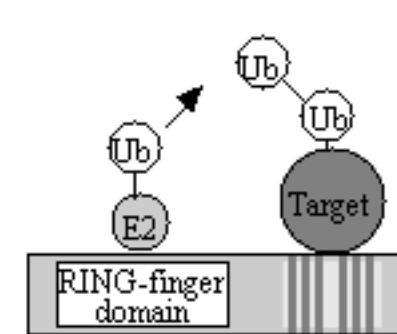
K10587	K10588	K10589	K04678	K05632
K05633	K05630	K10590	K10591...	K10592
K10593	K10594	K10595	K10614	K10615

U-box type E3



K10596	K10597	K09561
K10598	K10599	K10600

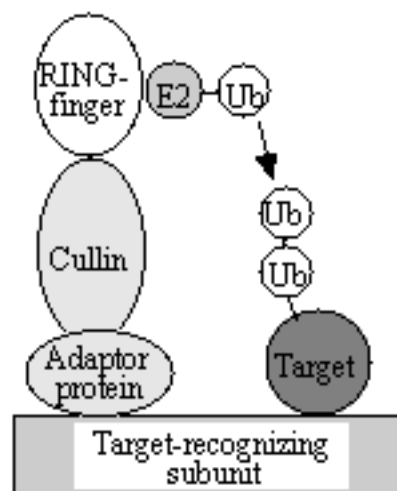
single RING-finger type E3



K06643	K04707	K04556	K04506	K10054	K03175	K04416
K10143	K10144	K16060...	K04706...	K10601	K10602	K10603
K10604	K10605	K10606	K08285	K10607	K10608	

multi subunit RING-finger type E3

Cullin-Rbx E3



	RING finger	Cullin	Adaptor protein	Target recognizing subunit
SCF complex	K03868	K03347	K03094	K03360...
ECV complex	K03868	K03870	K03873 K03872	K03871
Cul3 complex	K03868	K03869		K03876...
Cul4 complex	K03868	K10609	K10610	K10140...
ECS complex	K10611	K10612	K03873 K03872	K04694...
Cul7 complex	K03868	K10613	K03094	K10264

APC/C

	RING finger	Cullin	Adaptor protein	Target recognizing subunit	Other subunits
APC/C	K03358	K03349	?	K03363 K03364	K03348 K03350 K03352 K03353 K03354 K03355 K03356 K03357 K03359 K12456...

APC/C

RING-finger

Cullin

Adaptor protein

Target-recognizing subunit

Other subunits