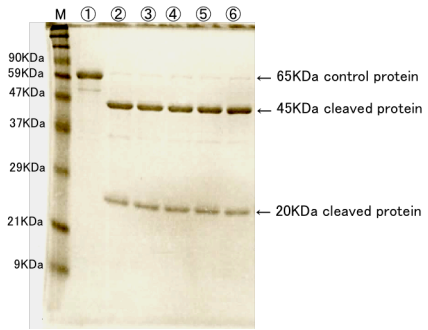
Recombinant HRV 3C protease form *E.coli*

Protein Name:	HRV 3C protease (6xHis-Tag fusion protein)
Type:	Recombinant
Source:	rhinovirus type 14
Expression Host:	*E.coli*
Formulation:	20mM Tris-HCl, 100mM NaCl, 5mM 3-Mercapto-1 2-propanediol, 50% glycerol
Concentration:	1unit/mL
Activity:	HRV 3C protease recognize the cleave site : LEVLFQ/GP. 1unit of HRV 3C protease cleave >95% of 100ug 65KDa protein that has one cleave site in 20mM Tris-HCl (pH8.0) at 4℃ for 16h.
Storage and Stability:	Store under best condition at -20℃. Samples are stable for six months from above condition. Do not repeat freeze-thaw cycle.
Molecular Mass:	21.2kDa (total 194AA, include histidine hexamer.)
Usage protocol:	Add HRV3C of 1unit to the solution containing the target protein 100ug, and it incubates 16h at 4 ℃. (recommendation reaction buffer : 20 mM Tris-HCl, 150mM NaCl, 10mM 3-Mercapto-1 2-propanediol, pH 8.0). When cutting efficiency is low, please increase the amount of addition of HRV3C, develop reaction time, and examine the optimal conditions. After cleaved, nickel chelate resin using 6xHisTag removes HRV3C.

Activity Check :



① control protein
② HRV3C protease : control protein = 1 : 10
③ HRV3C protease : control protein = 1 : 50
④ HRV3C protease : control protein = 1 : 100
⑤ HRV3C protease : control protein = 1 : 200
⑥ HRV3C protease : control protein = 1 : 500
M : Molecular marker

Several amount of HRV3C protease cleaved 65KDa control protein in 45KDa and 20KDa protein in 20mM Tris-HCl (pH8.0) at 4 ℃ for 16 hours. As a result, also in which HRV3C protease concentration, it was >95% of cleavage efficiency.