

**HtrA2/Omi 134-458** Human, Recombinant, His- tagged, *E.coli*

Cat. No. HTR0501  
Cat. No. HTR0551

Size : 0.5 mg  
Size : 100 µg

**Description:** HtrA2/Omi is a mammalian serine protease at high temperatures and has a chaperone activity at low temperature. The full-length HtrA2 is synthesized as a precursor protein and then targeted to the mitochondria where it is matured by the removal of N-terminal 133 residues. Mature HtrA2 consists of a putative transmembrane domain; an inhibitor of apoptosis protein (IAP)-binding motif; a single C-terminal PDZ domain that mediates protein-protein interactions. Recently, HtrA2 has known to contribute both to caspase-dependent and caspase-independent cell death. Mature form of HtrA2/Omi(residues 134-458) was overexpressed in *E.coli*, and purified by conventional column chromatography techniques.

**Form:** Liquid. In 20 mM Tris-HCl buffer (pH 8.0), 50 mM NaCl, 1 mM DTT, 20% Glycerol

**Molecular Weight:** 36 kDa

**Purity:** ≥ 95% by SDS PAGE

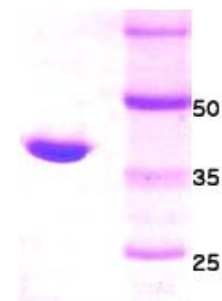
**Concentration :** 0.5mg/ml

**Sequences:**

MAVPSPPPAS PPSQYNFIAD VVEKTAPAVV YIEILDRHPF LGREVPISNG SGFVVAADGL  
IVTNAHVVD RRRVRVRLLS GDTYEAVVTA VDPVADIATL RIQTKEPLPT LPLGRSADVR  
QGEFVAMGS PFALQNTITS GIVSSAQRPA RDLGLPQTNV EYIQTDAID FGNAGGPLVN  
LDGEVIGVNT MKVTAGISFA IPSDRLREFL HRGEKKNSSS GISGSQRRYI GVMMLTLSPS  
ILAELQLREP SFPDVQHGVL IHKVLGSPA HRAGLRPGDV ILAIGEVMVQ NAEDVYEAVR  
TQSQLAVQIR RGRETLTYV TPEVTEGSHH HHHH

**General references :**

- Savopoulos JW., *et al.*, (2000) *Protein Expr. Purif.* 19, 227-34
- Gray CW, *et al.*, (2000) *Eur. J. Biochem.* 267, 5699-710
- Martins LM, *et al.*, (2002) *J. Biol. Chem.* 277, 439-44
- Van Loo G, *et al.*, (2002) *Cell Death Differ.* 9, 20-60
- Seong YM, *et al.*, (2004) *Protein Expr. Purif.* 33, 200-8



15% SDS-PAGE

**WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN, DIAGNOSTICS OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.**

**Storage :** Store at -20 °C. Avoid freeze/thaw cycles

**HtrA2/Omi 134-458 cleavage of  $\beta$ - Casein (Serine protease activity assay)**

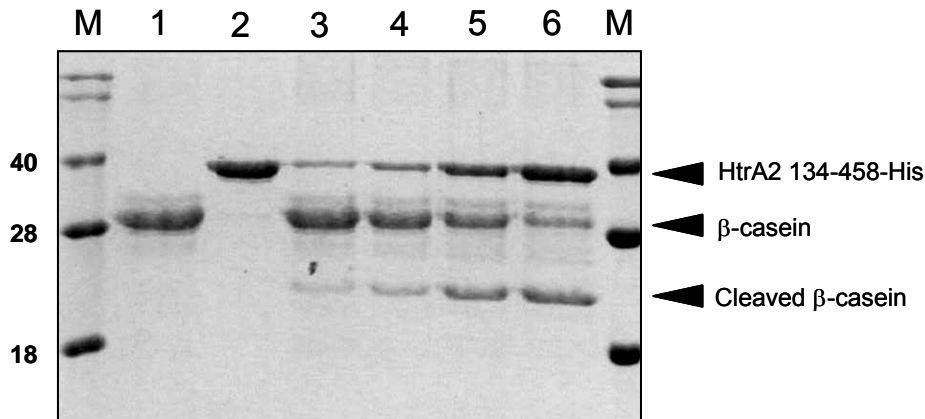


Fig.1 Activity assay result of HtrA2/Omi after incubation at 37 °C for 2hours with  $\beta$ -casein as substrate.

M : ATGen mid-range marker, 1:  $\beta$ -casein 30  $\mu$ g, 2: HtrA2 134-458-His 30  $\mu$ g

3:  $\beta$ -casein 30  $\mu$ g + HtrA2 134-458-His 5  $\mu$ g, 4:  $\beta$ -casein 30  $\mu$ g + HtrA2 134-458-His 10  $\mu$ g

5:  $\beta$ -casein 30  $\mu$ g + HtrA2 134-458-His 20  $\mu$ g, 6:  $\beta$ -casein 30  $\mu$ g + HtrA2 134-458-His 30  $\mu$ g

**Assay Methods:** Increasing amounts of human HtrA2/Omi 134-458 ( 5  $\mu$ g to 30  $\mu$ g) were added to 30  $\mu$ g of  $\beta$ -casein from bovine (Sigma, C6905) in 20 mM Tris, 50 mM NaCl, 20% Glycerol, 1 mM DTT, pH 8.0 (Reaction volume: 200  $\mu$ L ). The samples were mixed and incubated at 37° C for 2 hours. The reaction was stopped by the addition of 5X SDS sample buffer and heating at ~100° C for 5 minutes. 15  $\mu$ L of each cleavage samples was loaded and run by SDS/PAGE on a 15% gel and visualized by Coomassie staining/destaining.

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