ELANE (Elastase), Avi-His-Tag HiP™ Recombinant

Catalog: 101141

Lot: 210721

Product Information

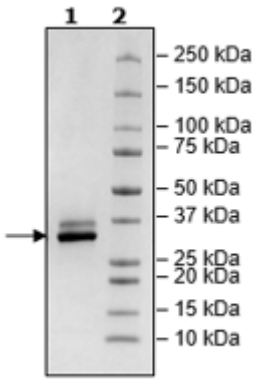
Construct:	ELANE (28-252-Avi-His)
Concentration:	0.60 mg/ml
Species:	Human
Formulated In:	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, 20% glycerol
Expression System:	HEK293
Format:	Aqueous buffer solution
Stability:	At least 6 months at -80°C. Avoid freeze/thaw cycles.
Storage:	-80°C
Genbank Accession:	NM_001972
MW:	27 kDa + glycans
Glycosylation:	This protein runs at a higher MW by SDS-PAGE due to glycosylation.
Purity:	≥90%
Aggregation:	<10%

Functional Assay with CD95 CHO cell line (BPS Bioscience #78499-H):

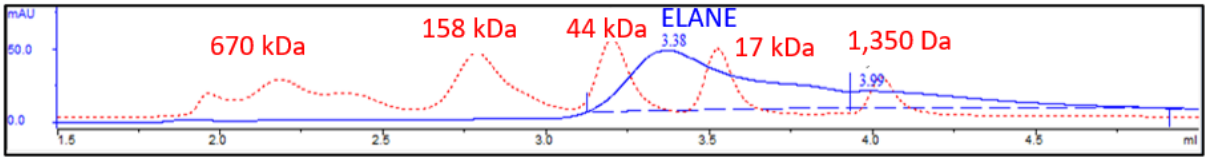
1. Activate ELANE protein using Recombinant Mouse Cathespin C (Rnd Catalog #2336-CY):
    a. Activation Buffer: 50 mM MES, 50 mM NaCl, pH 5.5
    b. Dilute ELANE to 50 µg/mL in Activation Buffer containing 50 µg/mL rmCathepsin C.
    c. Incubate for 2 hours at 37 °C to activate ELANE.
    d. Aliquot into multiple tubes to limit freeze/thaws and freeze at -80°C.
2. Protocol:
    a. Day 1: Seed cells: seed 20,000 CD95 CHO cells in 100 µl of Thaw Medium 3 in each well of a clear-bottom white 96-well plate. Incubate cells for 24 hours at 37°C and 5% CO2.
    b. Day 2: Wash cells: Carefully remove Thaw Medium 3 from the plate without disturbing the cells. Wash the plate once with 100 µl of F-12K Medium (no FBS). Remove the medium again and replace with 50 µl of F-12K basal medium (no FBS).
    c. Treat Cells: Dilute the activated rhELANE in F-12K medium to the desired concentration and add 50 µl of diluted rhELANE to the cells.
    d. Incubate cells for 4 hours at 37°C and 5% CO2. Note: Cell morphology will change at this point due to activation of the apoptosis pathway (see photos below).

Quality Control Data

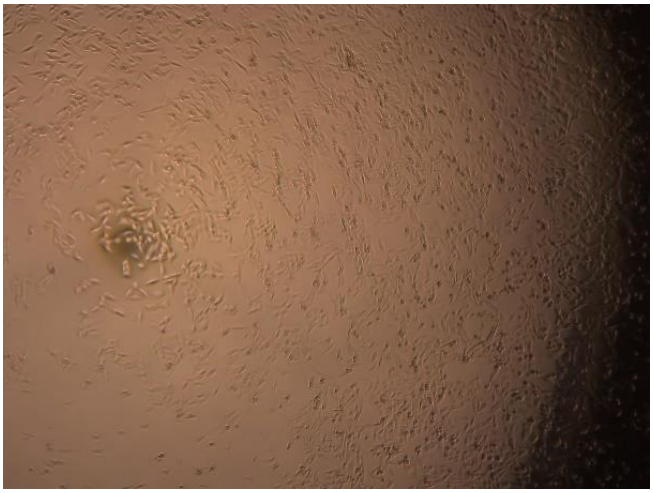
4-20% SDS-PAGE Coomassie Staining



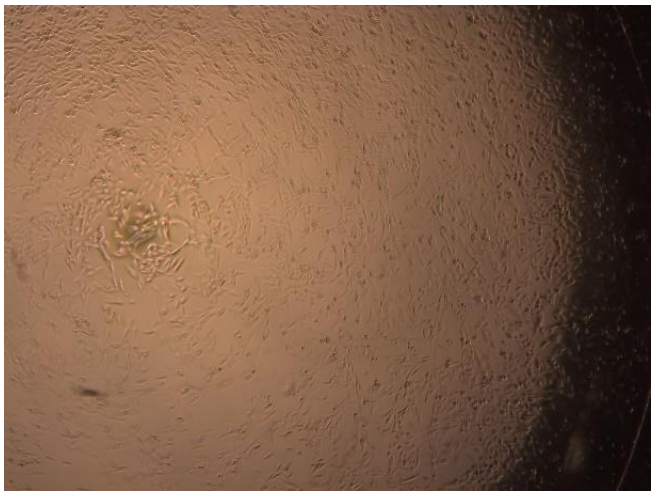
Gel Filtration Trace



CD95 CHO (78499-H), (-) ELANE (-) Cathepsin C, 4 hours after treatment



CD95 CHO (78499-H), (+) ELANE (-) Cathepsin C,
4 hours after treatment



CD95 CHO (78499-H), (+) ELANE (+) Cathepsin C,
4 hours after treatment