

Product datasheet

Human CTSC (Cathepsin C) knockout HeLa cell lysate ab257909

3 Images

Overview

Product name	Human CTSC (Cathepsin C) knockout HeLa cell lysate
Product overview	Knockout cell lysate achieved by CRISPR/Cas9.
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 17 bp deletion in exon1 and 19 bp deletion in exon1 and 32 bp deletion in exon1.
Passage number	<20
Knockout validation	Sanger Sequencing
Reconstitution notes	To use as WB control, resuspend the lyophilizate in 50 µL of LDS* Sample Buffer to have a final concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M DTT.

**Usage of SDS sample buffer is not recommended with these lyophilized lysates.*

Notes

Lysate preparation: Our lysates are made using RIPA buffer to which we add a protease inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found [here](#). Please refer to our lysis protocol for further details on how our lysates are prepared.

User storage instructions: Lyophilizate may be stored at 4°C. After reconstitution, store at -20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines. **[See here for more information on knockout cell lysates.](#)**

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Properties

Storage instructions Store at -80°C. Please refer to protocols.

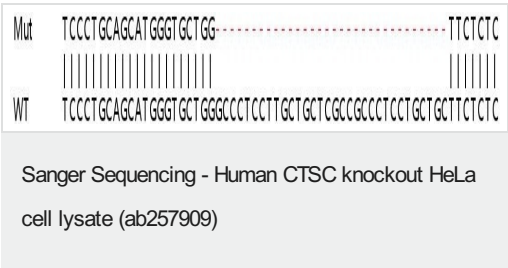
Components	1 kit
ab262251 - Human CTSC knockout HeLa cell lysate	1 x 100µg
ab255929 - Human wild-type HeLa cell lysate	1 x 100µg

Cell type	epithelial
Disease	Adenocarcinoma
Gender	Female
STR Analysis	Amelogenin X D5S818: 11, 12 D13S317: 12, 13.3 D7S820: 8, 12 D16S539: 9, 10 vWA: 16, 18 TH01: 7 TPOX: 8,12 CSF1PO: 9, 10

Target

Function	Thiol protease. Has dipeptidylpeptidase activity. Active against a broad range of dipeptide substrates composed of both polar and hydrophobic amino acids. Proline cannot occupy the P1 position and arginine cannot occupy the P2 position of the substrate. Can act as both an exopeptidase and endopeptidase. Activates serine proteases such as elastase, cathepsin G and granzymes A and B. Can also activate neuraminidase and factor XIII.
Tissue specificity	Ubiquitous. Highly expressed in lung, kidney and placenta. Detected at intermediate levels in colon, small intestine, spleen and pancreas.
Involvement in disease	Papillon-Lefevre syndrome Haim-Munk syndrome Periodontitis, aggressive, 1
Sequence similarities	Belongs to the peptidase C1 family.
Post-translational modifications	N-glycosylated. While glycosylation at Asn-53, Asn-119 and Asn-276 is mediated by STT3A-containing complexes, glycosylation at Asn-29 is mediated STT3B-containing complexes. In approximately 50% of the complexes the exclusion domain is cleaved at position 58 or 61. The two parts of the exclusion domain are held together by a disulfide bond.
Cellular localization	Lysosome.

Images



Allele-1: 32 bp deletion in exon1

Mut	TCCTGCAGCATGGGTGCTGG-----GCCCTCCTGCTGCTTCTCTC
WT	TCCTGCAGCATGGGTGCTGGGCCCTCCTTGTGCTCGCCGCCCTCCTGCTGCTTCTCTC

Allele-2: 19 bp deletion in exon1

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cell lysate (ab257909)

Mut	TCCTGCAGCATGGGTGCTGG-----CCGCCCTCCTGCTGCTTCTCTC
WT	TCCTGCAGCATGGGTGCTGGGCCCTCCTTGTGCTCGCCGCCCTCCTGCTGCTTCTCTC

Allele-3: 17 bp deletion in exon1

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