

Product datasheet

HeLa Cell Cycle Lysates: Thymidine-Treated, Nocodazole-Treated & Untreated Asynchronous Control ab136811

[3 Images](#)

Overview

Product name	HeLa Cell Cycle Lysates: Thymidine-Treated, Nocodazole-Treated & Untreated Asynchronous Control
Species reactivity	Reacts with: Human
Product overview	<p>ab136811 contains 3 vials of HeLa whole cell lysates from cells in different stages of the cell cycle: asynchronous, G1/S and G2/M. Asynchronous cells were harvested from untreated, subconfluent plates and this lysate contains cells in all stages of the cell cycle. G1/S cells were harvested following a double thymidine block procedure and represents cells at the G1 to S-phase transition (excess thymidine inhibits DNA synthesis). G2/M cells were harvested following sequential treatments with thymidine and nocodazole and represents cells that have duplicated DNA but are blocked at mitosis (nocodazole inhibits microtubule polymerization).</p> <p>Concentration: Untreated Lysate - 150 µg at 0.5 mg/mL Thymidine Treated Lysate - 150 µg at 0.5 mg/mL NocodazoleTreated Lysate - 150 µg at 0.5 mg/mL</p>
Notes	Each whole cell lysate was made by solubilizing cells in an SDS lysis buffer followed by BCA protein quantification and normalization to 0.5 mg/mL in SDS-PAGE sample buffer. A parallel treated sample of cells for each condition was analyzed by propidium iodide staining and flow cytometry to confirm cell cycle stage.
Tested applications	Suitable for: WB

Properties

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

Components	3 units
HeLa Asynchronous Control Lysate	1 x 150µg
HeLa G1/S Lysate	1 x 150µg

Components	3 units
HeLa G2/M Lysate	1 x 150µg

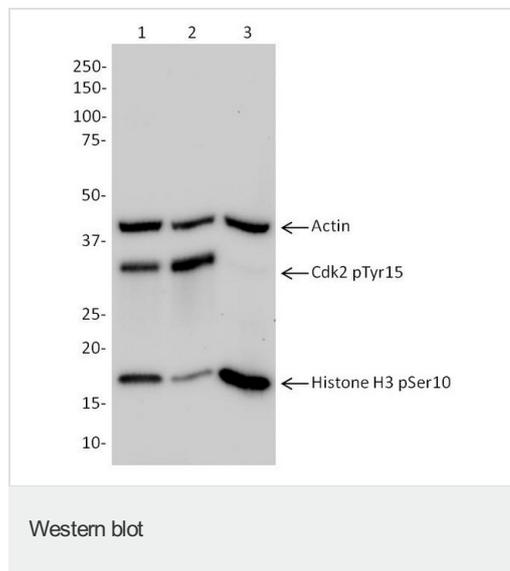
Applications

Our [Abpromise guarantee](#) covers the use of **ab136811** in the following tested applications.

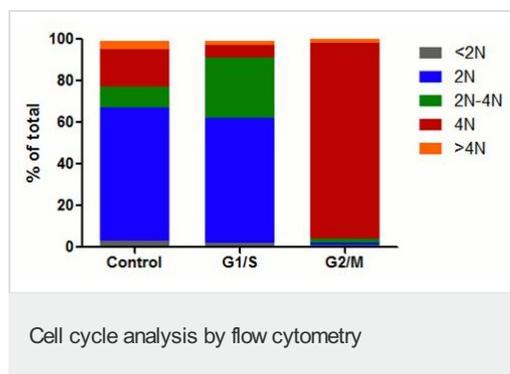
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration.

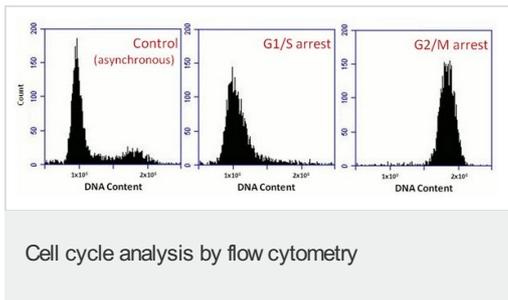
Images



Cdk2 pTyr15 and Histone H3 pSer10 bands are present in asynchronous cells. Cdk2 pTyr15 is elevated in G1/S arrested cells. Conversely, Histone H3 pSer10 is elevated in G2/M arrested cells. Primary antibody: All lanes Cell Cycle WB cocktail ([ab136810](#)) diluted to 1X in 4% milk/PBS. Lane 1: HeLa lysate; Untreated, asynchronous cells Lane 2: HeLa lysate; G1/S arrested cells (thymidine treatment) Lane 3: HeLa lysate; G2/M arrested cells (sequential thymidine and nocodazole treatments) All lysates at 15 µg per lane. Lysates are HeLa Cell Cycle Lysates ([ab136811](#)). Secondary antibody: All lanes anti-rabbit-HRP. Predicted band size: 42, 33, 17 kDa.



A portion of the cells from which the HeLa Cell Cycle Lysates ([ab136811](#)) made were analyzed for cell cycle by propidium iodide staining and flow cytometry. Asynchronous (untreated) cells show the classic distribution of 2N, 2N-4N and 4N DNA content representing G1, S and G2/M cell cycle phases. The G1/S arrested cells (treated by double thymidine block) are enriched for the 2N DNA peak. The G2/M cells (treated by sequential thymidine and nocodazole) are enriched for the 4N peak. This figure presents quantification of the propidium iodide histograms.



A portion of the cells from which the HeLa Cell Cycle Lysates (ab136811) made were analyzed for cell cycle by propidium iodide staining and flow cytometry. Asynchronous (untreated) cells show the classic distribution of 2N, 2N-4N and 4N DNA content representing G1, S and G2/M cell cycle phases. The G1/S arrested cells (treated by double thymidine block) are enriched for the 2N DNA peak. The G2/M cells (treated by sequential thymidine and nocodazole) are enriched for the 4N peak.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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