# Human CDK7 & CCNH & MNAT1 Heterotrimer Insect Cell Lysate (WB positive control)

**Catalog Number:** CT020-H07BL

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Biological Solution Specialist

## CDK7 & CCNH & MNAT1 Heterotrimer Transfected / Overexpression Cell Lysate Product Information

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| **Expressed Host:** | Baculovirus-Insect cells |
| **Products Description:** | Baculovirus-Insect Cell lysate that Human CDK7 & CCNH & MNAT1 Heterotrimer transfected / overexpressed for Western blot (WB) positive control. The whole cell lysate is provided in 1X Sample Buffer (1X modified RIPA buffer+1X SDS loading buffer). |
| **Sequence information:** | A DNA sequence encoding the human CDK7 (P50613) (Ala 2-Phe 346) was fused with a polyhistidine tag at the N-terminus, constructed the plasmid 1; A DNA sequence encoding the human CCNH (P51946) (Tyr 2-Leu 323) was fused with a polyhistidine tag at the N-terminus, constructed the plasmid 2. A DNA sequence encoding the human MNAT1 (P51948) (Asp 2-Ser 309) was fused with a polyhistidine tag at the N-terminus, constructed the plasmid 3. The three plasmids were co-expressed and the heterotrimer was purified. |
| **Predicted N Terminal:** | His & His & His |
| **Molecule Mass:** | The recombinant heterotrimer of human CDK7/CCNH/MNAT1 comprises 1032 (364 + 341 + 327) amino acids and has a calculated molecular mass of 118.8 (41.2 + 39.7 + 37.9) kDa. The apparent molecular mass of rh CDK7/CCNH/MNAT1 heterotrimer is approximately 25,38 & 44 kDa respectively in SDS-PAGE under reducing conditions. |
| **Species:** | Human |

## CDK7 & CCNH & MNAT1 Heterotrimer Transfected / Overexpression Cell Lysate Usage Guide

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| **Preparation Method:** | Cell lysate was prepared by homogenization in ice-cold modified RIPA Lysis Buffer with cocktail of protease inhibitors (Sigma). Cell debris was removed by centrifugation. Protein concentration was determined by Bradford assay (Bio-Rad protein assay, Microplate Standard assay). The cell lysate was boiled for 5 min in 1 x SDS loading buffer (50 mM Tris-HCl pH 6.8, 12.5% glycerol, 1% sodium dodecylsulfate, 0.01% bromophenol blue) containing 5% b-mercaptoethanol, and lyophilized. |
| **Lysis Buffer:** | Modified RIPA Lysis Buffer: 50 mM Tris-HCl pH 7.4, 150 mM NaCl, 1mM EDTA, 1% Triton X-100, 0.1% SDS, 1% Sodium deoxycholate, 1mM PMSF. |
| **Quality Control Testing:** | 12.5% SDS-PAGE Stained with Coomassie Blue after protein purification. |
| **Stability:** | Samples are stable for up to twelve months from date of receipt. |
| **Recommend Usage:** | 1. Centrifuge the tube for a few seconds and ensure the pellet at the bottom of the tube.<br>2. Re-dissolve the pellet using 200μL pure water and boil for 2-5 min.<br>3. Store the lyophilized cell lysate at 4℃. After re-dissolution, recommend to aliquot it into smaller quantities and store at -80℃. |
| **Storage Buffer:** | 1 X Sample Buffer (1 X modified RIPA buffer+1 X SDS loading buffer). |
| **Storage Instruction:** | Store at 4℃. After re-dissolution, aliquot and store at -80℃. |
| **Application notes:** | Western blot (WB): Use at an assay dependent dilution.<br>Other Applications: Not tested.<br>Optimal dilutions/concentrations should be determined by the end user. |