

**MATERIAL DATA SHEET****His<sub>6</sub>-UbcH3 Dominant Negative, *human recombinant*  
Cat. # E2-611**

UbcH3 plays an essential role in the progression of cells from the G1 to S phase of the cell division cycle. One pathway (requiring Cdc34) initiates DNA replication by degrading a CDK (cyclin-dependent kinase) inhibitor. The second pathway, involves the anaphase-promoting complex (APC) initiates chromosome segregation and exit from mitosis by degrading anaphase inhibitors and mitotic cyclins. The active site of this enzyme has been chemically inactivated for use as a negative or competitive control.

**Product Information**

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|------------------|---|
| <b>Quantity:</b> | 100 µg  |
| <b>Stock:</b>    | X mg/ml (X µM) in 50 mM HEPES pH 8.0, 50 mM NaCl, 10% glycerol, 1 mM DTT. Actual concentration will vary with specific Lot #. |
| <b>MW:</b>       | 27 kDa  |
| <b>Purity:</b>   | > 95% by SDS-PAGE   |

**Use & Storage**

|                 |  |
|-----------------|--|
| <b>Use:</b>     | Typical enzyme concentration to support conjugation <i>in vitro</i> is 100 nM to 1 µM depending on conditions. |
| <b>Storage:</b> | Store at -80°C. Avoid multiple freeze/thaw cycles.   |

**Literature**

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| <b>References:</b> | Goebel M.G., <i>et al.</i> (1988) <i>Science</i> <b>241</b> :1331-1335<br>Gonen H., <i>et al.</i> (1999) <i>J. Biol. Chem.</i> <b>274</b> :14823-14830<br>King R. W., <i>et al.</i> (1996) <i>Science</i> <b>274</b> :1652-1659<br>Listwan J., <i>et al.</i> (1998) <i>EMBO. J.</i> <b>17</b> :368-383<br>Pintard L., <i>et al.</i> (2003) <i>Nat. Cell. Biol.</i> <b>5</b> :856-857<br>Plon S.E., <i>et al.</i> (1993) <i>Proc. Natl. Acad. Sci.</i> <b>90</b> :10484-10488<br>Ptak C., <i>et al.</i> (1994) <i>J. Biol. Chem.</i> <b>269</b> :26539-26545<br>Seol J.H., <i>et al.</i> (1999) <i>Gene. Dev.</i> <b>13</b> :1614-1626<br>Varelas X., <i>et al.</i> (2003) <i>Mol. Cell. Biol.</i> <b>23</b> :5388-5400 |
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