PRODUCT MANUAL
OF
BUB1 PROTEIN CRYSTAL
BUB1 Protein Crystal
Mitotic checkpoint serine/threonine-protein kinase BUB1

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<th>Cat. No.</th>
<th>CBCRY01</th>
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**Background**
The kinase (BUB1) functions in part by phosphorylating a member of the mitotic checkpoint complex and activating the spindle checkpoint. Mutations in this gene have been associated with aneuploidy and several forms of cancer.

**Molecular description**
- **Protein Classification**: Transferase
- **Structure Weight**: 42450.29 Da
- **Polymer**: 1
- **Molecule**: Mitotic checkpoint serine/threonine-protein kinase BUB1
- **Chain Length**: 365 amino acids

**Crystal Description**
- **PDB ID**: 3E7E
- **MMDB ID**: 68144
- **Source**: Spodoptera frugiperda
- **Method**: X-Ray Diffraction
- **Resolution**: 2.31 Å
- **Ligand Chemical Component**: Adenosine-5'-triphosphate; chloride ion; Magnesium ion

**Gene information**
- **Gene Name**: BUB1
- **Synonyms**: BUB1A, BUB1L, hBUB1, BUB1 budding uninhibited by benzimidazoles 1 homolog; budding uninhibited by benzimidazoles 1; mitotic spindle checkpoint kinase; putative serine/threonine-protein kinase
- **UniProt ID**: O43683
- **Gene ID**: 699
- **Chromosome Location**: 2q14
- **Function**: nucleotide binding; protein kinase activity; protein serine/threonine kinase activity; ATP binding; kinase activity; transferase activity

**Reference**