



## Recombinant *B. circulans* Intein [His] (DAG4325)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

Product Overview	Recombinant <i>Bacillus Circulans</i> Intein, His-tagged
Species	<i>B. circulans</i>
Purity	Greater than 95% as determined by SDS-PAGE.
Conjugate	His
Applications	Immunogen
Preservative	None
Storage	2-8°C short term, -20°C long term

### BACKGROUND

**Introduction** The first generation of expression vector of this kind used modified *Saccharomyces cerevisiae* VMA (Sce VMA) intein. Chong et al. used chitin binding domain form *Bacillus circulans* as affinity tag and fused this tag in modified Sce VMA intein. The modified intein undergoes self-cleavage reaction at its N-terminal peptide linkage by 1,4-dithiothreitol (DTT),  $\beta$ -mercaptoethanol ( $\beta$ -ME) or cystine at low temperatures over a broad pH range. After expression of the recombinant protein cell homogenate is passed through the column containing chitin. This allows CBD of the chimeric protein to bind to column. Further when temperature is lowered and the above described molecules are passes through column, the chimeric protein undergoes self splicing and only target protein is eluted. This novel technique eliminated proteolysis step and modified Sce VMA stays in column attached to chitin through CBD

**Keywords** *Bacillus Circulans* Intein; *B. circulans* Intein; Intein