

## Recombinant Enzyme Product Specification Sheet

<b>Cat. No.:</b>	PRO-E0218	<a href="#">add this product to cart</a>
<b>LOT:</b>	2009-0218-2	<a href="#">view all arabinofuranosidases</a>
<b>Activity:</b>	Arabinoxylan arabinofuranosidase	
<b>Synonyms:</b>	$\alpha$ -N-Arabinofuranosidase; arabinosidase; $\alpha$ -arabinosidase; $\alpha$ -L-arabinosidase; $\alpha$ -arabinofuranosidase; polysaccharide $\alpha$ -L-arabinofuranosidase; $\alpha$ -L-arabinofuranoside hydrolase; L-arabinosidase; $\alpha$ -L-arabinanase; $\alpha$ -L-arabinofuranoside arabinofuranohydrolase; alpha-N-arabinofuranosidase; alpha-arabinosidase; alpha-L-arabinosidase; alpha-arabinofuranosidase; polysaccharide alpha-L-arabinofuranosidase; alpha-L-arabinofuranoside hydrolase; alpha-L-arabinanase; alpha-L-arabinofuranoside arabinofuranohydrolase	
<b>Nomenclature:</b>	CAZy [GH43, glycoside hydrolase family 43, member of clan GH-F], XynD, xylanase D, AXH, AXH-m2,3, AXH-m23, AF	
<b>Source organism:</b>	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. 168	
<b>Enzyme Commission No.:</b>	3.2.1.55	
<b>Activity:</b>	-	<b>NOTE:</b> this product has been produced and is awaiting assay. It is thus currently available for purchase by the mg only. If you have a query, please contact us ( <a href="mailto:technical@prozomix.com">technical@prozomix.com</a> )
<b>Specific activity:</b>	-	
<b>Purity:</b>	> 95 % as judged by SDS-PAGE	
<b>Form and storage:</b>	Supplied in 3.2 M ammonium sulphate, store at 4°C (shipped at room temperature)	
<b>pH optimum:</b>	5.6	
<b>Temperature optimum:</b>	45 °C	
<b>[Protein]:</b>	5.3 mg/mL	
<b>Sequence length:</b>	485 amino acids ( <a href="#">view sequence</a> )	
<b>Accession No.:</b>	<a href="#">Q45071</a> , <a href="#">NP_389698.1</a> , <a href="#">CAB13699.1</a> , <a href="#">BSUB224308:BSU1816-MON</a>	
<b>Molecular weight:</b>	53852.8 Da	(theoretical)
	~ 54000 Da	(observed by SDS-PAGE)
	-	(observed by mass spectrometry)
<b>Biological function:</b>	Catalyses the specific release of arabinose from O-2 or O-3 monosubstituted xylosyl residues in arabinoxylans and arabinoxyloligosaccharides	
<b>Potential application(s):</b>	<a href="#">Biomass conversion</a> , <a href="#">carbohydrate research</a>	

<b>Comments:</b>	PDB: <a href="#">3C7E</a> , <a href="#">3C7F</a> , <a href="#">3C7G</a> , <a href="#">3C7H</a> , <a href="#">3C7O</a> . This enzyme contains a structural calcium ion
<b>Usage:</b>	Agitate vial sufficiently to fully homogenise enzyme precipitate before use
<b>Assay:</b>	-

**Primary sequence:**

MTTIAKHIGNSNPLIDHHLGADPVALTYNGRVYIYMSSDDYEYNSNGTIKDNSFANLNRVFISSADMVNWTDHG  
AIPVAGANGANGGRIAKWAGASWAPSIIVKINGKDKFFLYFANSGGGIGVLTADSPIGPWTDPGKPLVTPST  
PGMSGVVWLFDPVAVFVDDDDGTGYLYAGGGVPGVSNPTQQWANPKTARVIKLGPDMTSVVGSASTIDAPFMFEDS  
GLHKYNGTYYYSYCINFGGTHPADKPPGEIGYMTSSSPMGPFYRGHFLKNPGAFFGGGNNHHAVFNFKNEWYV  
VYHAQTVSSALFGAGKGYRSPHINKLVHNADGSIQEVAAANYAGVTQISNLPYNRVEAETFANNGRILTEKSTAP  
GGPVNNQHVTSIQNGDWIAVGNADFGAGGARSFKANVASTLGGKIEVRLDSADGKLVGTLNVPSTGGAQTWREIE  
TAVSGATGVHKVFFVFTGTGTGNLNFNDYWQFTQR

- Literature:**
1. [Bourgois et al. \(2007\) \*Appl. Microbiol. Biotechnol.\* \*\*75\*\*, 1309-1317](#)
  2. [Vandermarliere et al. \(2009\) \*Biochem. J.\* \*\*418\*\*, 39-47](#)