

Catalog Number M1489MP  
Product Name 4-methylumbelliferyl  $\beta$ -D-galactopyranoside (MUG)  
CAS Number / Name 6160-78-7 / 2H-1-Benzopyran-2-one, 7-( $\beta$ -D-galactopyranosyloxy)-4-methyl-  
Molecular Formula  $C_{16}H_{18}O_8$   
Molecular Weight 338.31  
Appearance colorless solid  
Lot Number 1639210

	LOT DATA	SPECIFICATION
<b>Absorption</b> <sup>1</sup>		
Maximum Extinction	317 nm 14300 cm <sup>-1</sup> M <sup>-1</sup>	316 $\pm$ 3 nm 14500 $\pm$ 1000 cm <sup>-1</sup> M <sup>-1</sup>
<b>Fluorescence</b> <sup>1</sup>		
Emission Maximum	375 nm	374 $\pm$ 4 nm
<b>HPLC</b>		
Purity	99 % at 254 nm	$\geq$ 95 % at 254 nm
<b>NMR</b>		
Result	meets specification	consistent with structure
<b>Miscellaneous Information</b>		
Material Lot Number	73504990	N/A

1. Solvent: Buffer, 50 mM potassium phosphate (pH 9).

Rachel Smith, Ph.D., Quality Assurance

08-Jul-2013

Life Technologies Corporation, on behalf of its Invitrogen business, Molecular Probes® labeling and detection technologies, certifies on the date above that this is an accurate record of the analysis of the subject lot and that the data conform to the specifications in effect for this product at the time of analysis.