

**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<sub>16</sub>H<sub>18</sub>O<sub>8</sub>  
**Molecular Weight** 338.31  
**Appearance** colorless solid  
**Lot Number** 1450847

	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	73479323	N/A

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

*Betty Wood*

Betty Wood, Quality Assurance Manager  
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.