## **MOLECULAR PROBES®**

Catalog Number	M1489MP	
Product Name	4-methylumbelliferyl β-D-galactopyranoside (MUG)	
CAS Number / Name	6160-78-7 / 2H-1-Benzopyran-2-one, 7-(β-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	1189973	

	LOT DATA	SPECIFICATION
Absorption <sup>1</sup>		
Maximum	317 nm	316 ± 3 nm
Extinction	14200 cm <sup>-1</sup> M <sup>-1</sup>	14500 ± 1000 cm <sup>-1</sup> M <sup>-1</sup>
Fluorescence <sup>1</sup>		
Emission Maximum	376 nm	374 ± 4 nm
HPLC		
Purity	99 % at 254 nm	≥ 95 % at 254 nm
NMR		
Result	meets specification	consistent with structure
Miscellaneous Information		
Material Lot Number	73203924	N/A

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

Betty Wood

Betty Wood, Quality Assurance Manager 20-Jul-2012

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.