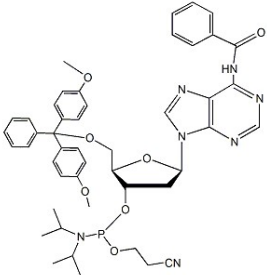


**CERTIFICATE OF ANALYSIS**

<b>PRODUCT NAME:</b>	dA(bz) Amidite, 1000 ml Bottle	<b>STRUCTURE</b> 
<b>PRODUCT NUMBER:</b>	4462004	
<b>LOT NUMBER:</b>	WK2502	
<b>BULK NUMBER:</b>	WH00951	
<b>DESCRIPTION:</b>	5'-O-Dimethoxytrityl-N <sup>6</sup> -benzoyl-2'-deoxyadenosine-3'-O-(β-cyanoethyl-N,N-diisopropyl) phosphoramidite	
<b>CHEMICAL FORMULA:</b>	C <sub>47</sub> H <sub>52</sub> N <sub>7</sub> O <sub>7</sub> P	
<b>MOLECULAR WEIGHT:</b>	857.95 g/mol	
<b>CAS NUMBER:</b>	98796-53-3	
<b>STORE:</b>	-20°C	
<b>SHIP:</b>	Ambient	
<b>MANUFACTURE DATE:</b>	08/25/2021	
<b>RETEST DATE:</b>	02/25/2025	
<b>EXPIRATION DATE:</b>	08/24/2025	

**ANALYSIS RESULTS**

Property	Specification Limits	Observed Value
Purity by HPLC	≥ 99%	100%
	Single Impurity: None > 0.5%	None
	Presence of dC, dG or T amidite ≤ 0.10%	0.00%
	Sum of dC, dG or T amidite ≤ 0.3%	0.0%
Identification by UV Spectrum via HPLC Analysis	Matches Reference	Pass
Purity by <sup>31</sup> P NMR	≥ 99%	100%
	Sum of non-primary peaks at 140-152 ppm ≤ 0.3%	0.0%
	Sum of non-primary peaks at 5-35 ppm ≤ 1.0%	0.1%
	Peaks > 170 ppm: None Detected	None
Color	Color intensity of the powder must not exceed Pantone #P1-4U or #P4-2U	Pass
Water Content	≤ 0.3% w/w	0.2%
Solution Clarity	0.2 M solution in acetonitrile is free from undissolved particulate	Pass
Average Coupling Efficiency	≥ 98.0%	NA
Residual Solvent	≤ 3.0% total % by weight solvent residue	1.4%
Material Origin (TSE/BSE)	No known animal-derived materials were used in the manufacture of this product	Pass

For Research Use Only. Not for use in diagnostic procedures.

Phosphoramidites are sensitive to environmental conditions when in powder or liquid form. Take precautions to avoid potential precipitation, degradation or hydrolysis that can affect performance or delivery of the phosphoramidite during synthesis. Control temperature, humidity, and exposure time to air for both the phosphoramidite and diluent.

**QC Release By:**



Gina Kogutkiewicz  
Manager, Business Systems & Compliance  
8/25/2021

**QC Release Date:**

**Revision 8**