



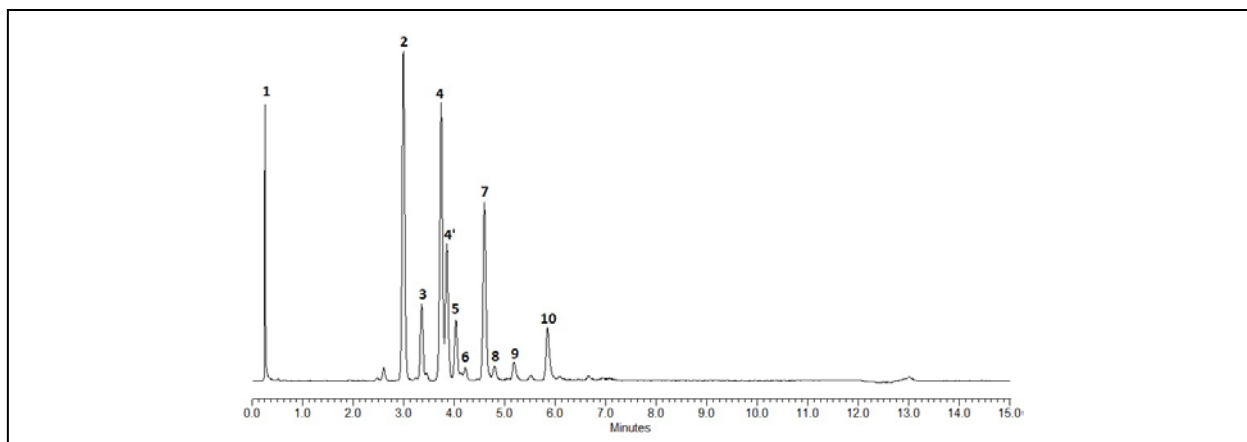
## CERTIFICATE OF ANALYSIS

|               |                                                                                                                                                                                                                                                               |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PRODUCT NAME: | AdvanceBio 2-AB Human IgG N-glycan library                                                                                                                                                                                                                    |
| PRODUCT CODE: | GKSB-005                                                                                                                                                                                                                                                      |
| LOT NUMBER:   | DP19L2401                                                                                                                                                                                                                                                     |
| PACK SIZE:    | 200 pmol (qualitative chromatographic standard for N-glycan identification)                                                                                                                                                                                   |
| FORM:         | Dry solid                                                                                                                                                                                                                                                     |
| STORAGE:      | Store at $-20^{\circ}\text{C}$ in the dark before and after reconstitution                                                                                                                                                                                    |
| EXPIRATION:   | January 2025, may be used for 1 year after reconstitution                                                                                                                                                                                                     |
| STRUCTURE:    | The Human IgG N-Linked Glycan Library consists of complex biantennary oligosaccharides consistent with N-glycans on normal human IgGs <sup>1,2,3</sup> (see Table 1). The reducing termini are derivatized with the fluorescent dye, 2-AB (2-aminobenzamide). |

**LABORATORY REAGENT**

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## Quality Control:



**Figure 1 - UPLC Results:** 6–9 pmol (1  $\mu$ L, aqueous) of the 2-AB-labeled library was injected on a Waters ACQUITY UPLC H Class System utilizing a 15-minute method under the conditions below:

| Time (min) | Flow (mL/min) | % ACN | % Buffer |
|------------|---------------|-------|----------|
| 00.0       | 1.0           | 75.0  | 25.0     |
| 12.0       | 1.0           | 52.5  | 47.5     |
| 12.1       | 0.5           | 40.0  | 60.0     |
| 12.5       | 0.5           | 40.0  | 60.0     |
| 12.6       | 0.5           | 75.0  | 25.0     |
| 12.7       | 1.0           | 75.0  | 25.0     |
| 15.0       | 1.0           | 75.0  | 25.0     |

Column: Waters ACQUITY UPLC BEH Glycan Column (1.7  $\mu$ m, 2.1 x 100 mm)  
 ACN: Acetonitrile  
 Buffer: 100 mM ammonium formate, pH 4.4  
 Flow rate: As stated in table, in mL/min  
 Temperature: 60  $^{\circ}$ C  
 Max Pressure: 15,000 psi  
 Fluorescence Detection:  $\lambda_{\text{ex}}$  = 330 nm,  $\lambda_{\text{em}}$  = 420 nm

**Table 1 - Peak Identification of 2-AB Labeled Human IgG N-Linked Glycan Library**

| Peak Number | Glycan Identification                                                                  | ProZyme | Common | Oxford (New)   | Structure <sup>4,5</sup> |
|-------------|----------------------------------------------------------------------------------------|---------|--------|----------------|--------------------------|
| 1           | Free Dye (2-AB)                                                                        |         |        |                |                          |
| 2           | Asialo-, agalacto- biantennary with core fucose                                        | NGA2F   | G0F    | F(6)A2         |                          |
| 3           | Asialo-, agalacto- biantennary with core fucose and with bisecting N-Acetylglucosamine | NGA2FB  | G0FB   | F(6)A2B        |                          |
| 4           | Asialo-, monogalactosylated biantennary with core fucose                               | NA2G1F  | G1F[6] | F(6)A2[6]G(4)1 |                          |



Allow the unopened vial to reach ambient temperature and tap on a solid surface to ensure that most of the material is at the bottom of the vial. Gently remove the cap, add the desired volume of ultra-pure water or aqueous buffer, re-cap and mix thoroughly to redissolve all the material.

For maximal recovery, ensure that the cap lining is also rinsed. Centrifuge the reconstituted vial briefly before use.

Make sure that any glassware, plasticware, solvents or reagents used are free of glycosidases and carbohydrate contaminants.

Minimize exposure to elevated temperatures or extremes of pH. Store the reconstituted glycan at  $-20^{\circ}\text{C}$ . Allow the vial to equilibrate to ambient temperature before use.

**Directions For Use:** The amount of 2-AB-labeled library standard injected on a UPLC column is typically 6–9 pmol of total glycan. For our Quality Control testing, one vial was dissolved in 30  $\mu\text{L}$  of water and 1  $\mu\text{L}$  injected on the ACQUITY column. For larger injection volumes or other LC systems we recommend further dilution as necessary for compatibility with your mobile phase.

## REFERENCES

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Authorized Signature