

## mAb pH Gradient Buffer, MS Buffer

**Cat. No.** mAb pH Gradient Buffer-55    **Lot. No.** (See product label)

### SPECIFICATION

#### Product Overview

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <b>Description</b> | pH gradient buffer is an innovative elution buffer (or mobile phase) that changes pH linearly for separation and purification of mAb antibodies, glycoproteins and PTM modified proteins by ion exchange (IEX) chromatography. In pH gradient buffer-based IEX chromatography, the pH of the initial buffer is kept at a constant level to ensure that the charged proteins bind to oppositely charged ions of the stationary phase. Then, the protein is eluted by linearly changing the pH of the buffer so that the protein has a zero net charge and can elute from the column. this buffer are suitable for IEX-MS to characterize intact mAb or subunit. |
| <b>Form</b>        | Lyophilized powder, Each bottle contains 0.3-1 g Ammonium acetate, and 0.2 g Organic acid.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Purity</b>      | Pure chromatography reagents with < 0.01 absorbance at 280 m, analyzed by liquid chromatography.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Storage</b>     | In 4 centigrade refrigerator as lyophilized powder.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>CAS No.</b>     | 6915-15-7-631-61-8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Shelf life</b>  | 24 months at 4 centigrade as powder; 1 day at 4 centigrade as solution.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Usage Notes</b> | Reference Procedure for mAb subunit and intact protein: Column: SCX, 10 µm, 2.1 * 250 mm or 2.1 * 50 mm Flow rate: 0.3 mL/min Eluent A: 1× mAb pH buffer A (pH 5.5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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Eluent B: 1× mAb pH Buffer B (pH 8.5) Gradient: 0-1 min, 0% B; 1-31 min, 0-100% B; 31-34 min, 100% B; 34-40 min, 0% B Temperature: 30 centigrade FLR detection: Ex: 280 nm, Em: 360 nm UV detection: 280 nm Load: 0.2-10 µg Inject volume: 4 µL

**Resuspension Buffer**

Dissolve reagents in 100 mL deionized, double-distilled water.

**pH Range**

pH Adjustment: At room temperature, slowly add LC grade ammonia adjust pH value to ensure the Buffer A pH=5.5; the Buffer B=8.5 for ready mobile phase of LC Elution Buffer (mAb): pH Buffer A, pH 5.5 Elution Buffer B (mAb): pH Buffer B, pH 8.5 Linear pH Range: Linear correlation coefficient > 0.99 at pH 5.5-8.5 in columns of IEX chromatography. pH Accuracy: pH 5.5 for mAb pH Buffer A and pH 8.5 for mAb pH Buffer B with error less than 0.2. pH Elution Linearity: The linear correlation coefficient of 225 nm absorbance > 0.999 with zero volume injection and SCX ion exchange chromatography system in 30 min run time at 30 centigrade column temperature. pH Elution Degree of Separation: Linear elution degree of separation > 1 with 5 pKa protein mAb: IgG A1, Ribonuclease A, Ribonuclease B.

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