

JBScreen Buffer Kit

Sodium Acetate

Cat. No.: CO-101

The **JBScreen Buffer Kit – Sodium Acetate** contains ready-made buffer solutions with preset pH values. Each buffer is provided as a 1.0 M stock solution and supplied in 10 ml volumes.

The **JBScreen Buffer Kit – Sodium Acetate** comprises 21 reagents, covering a pH range from 3.6 – 5.6 in 0.1 pH unit increments. Each sodium acetate solution has been carefully titrated using hydrochloric acid.

Specifications

Buffer Reagent: Sodium Acetate

Molecular Formula: $C_2H_3NaO_2$

Molecular Weight: 82.03

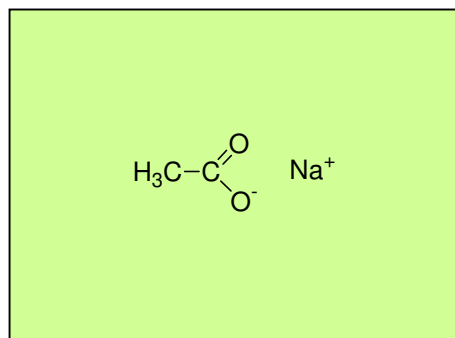
EC Number: 2048238

CAS Number: 127-09-3

pKa-Value (20 °C): 4.75

Useful pH-Range: 3.6 - 5.6

Titrated with: Hydrochloric Acid

**Store at 4 °C**

Application

JBScreen Buffer Kit – Sodium Acetate is designed for convenient reproduction and optimization of crystallization conditions. The solutions can be used to reformulate conditions of the **JBScreen family**, e.g. JBScreen Classic, JBScreen Basic, JBScreen Cryo, (see below for an example) and other commercially available crystallization screens.

Furthermore, **JBScreen Buffer Kit – Sodium Acetate** can be employed for the straightforward preparation of custom screen solutions for the refinement and optimization of initial crystallization conditions. The **JBScreen Buffer Kit** formulations will help to save time preparing accurate and high-quality reagents for the reproducible production of single protein crystals.

Example:

JBScreen Classic 2, condition C6 (= C10 in JBScreen Classic HTS I):

30 % w/v PEG 4000, 100 mM Sodium Acetate pH 4.6, 100 mM Magnesium Chloride

Required stock solutions:

50 % w/v PEG 4000, **1.0 M Sodium Acetate pH 4.6 (JBScreen Buffer Kit)**,

2.0 M Magnesium Chloride

In order to make up 1 ml of a reservoir solution pipette

1. 250 μ l of sterile deionized water
2. 50 μ l of 2.0 M Magnesium Chloride
3. 100 μ l of 1.0 M Sodium Acetate pH 4.6
4. 600 μ l of 50 % w/v PEG 4000

into the plate reservoir. Mix thoroughly until the solution is homogeneous.

Note: The final pH of the reservoir solution may vary from the indicated pH, depending on the nature of the reagents added to the JBScreen Buffer Kit solution.

For optimal results in the crystallization strategy, it is recommended to use the **JBScreen Buffer Kit – Sodium Acetate** together with **JBScreen Single Stocks**.