

### Carbonate buffer for Coating

Product Name	Product Code	Kit Packing
Carbonate buffer	ML224-100ML	100ml
for coating	ML224-500ML	500ml

#### Introduction:

Coating is the first step in any ELISA. Coating means the immobilization of antigen, antibodies or any other compound on the well surface. It is the process where a suitably diluted antigen or antibody is incubated until adsorbed to the surface of the microtiter plate. Adsorption occurs passively as the result of hydrophobic interactions between the amino acids side chains on the antibody or antigen used for coating, and the plastic surface. It is dependent upon time, temperature, and the pH of the coating buffer, as well as the concentration of the coating agent.

#### Description:

HiMedia's Carbonate Buffer for Coating is a carbonate-based buffer designed to use in any ELISA format for proteins and antibody coating on polystyrene plate. It helps to immobilize and stabilize the coating antigen or antibody added to the wells to maximize the adsorption of the protein to polystyrene plates. By stabilizing the adsorbed protein, the antigenic regions are preserved allowing greater binding reactivity and enhanced specific signal.

#### Application:

- Enhances the absorption of antigens or antibodies onto ELISA plates
- Stabilize tertiary structures of adsorbed antibodies and antigens
- Increases shelf life of coated plates

#### Composition:

Carbonate buffer for Coating (100mM) consists of 29 mM Sodium Carbonate and 71 mM Sodium bicarbonate with pH 9.6.

#### Concentration:

The coating buffer is supplied as a ready to use.

#### Properties:

- Appearance : Colorless solution
- Clarity : Clear and free of particles
- Sterility : No Bacterial or Fungal growth observed after 14 days of incubation  
as per USP Specifications
- Suitability test : This solution has been tested and is suitable for use in ELISA procedures.

Please refer disclaimer Overleaf.

**Protocol:**

1. Dilute the coating antigen or antibody in a coating buffer at required concentration. (Typically, 1-10 µg/ml)
2. Add 50-200 µl of coating buffer containing coating antigen or antibody to the wells of microtiter plates.
3. Shake the microtiter plate and cover with lid or sealing film.  
**Note:** During coating, it is important to maintain the plates in a moist environment to minimize evaporation.
4. Incubate overnight at 4°C or 2-3 hours at Room temperature.  
**Note:** incubation time and temperature can vary depending upon antigen and antibody used for coating.

**Storage conditions:**

Carbonate Buffer for Coating has to be stored at 2-8 °C. Under recommended condition, the reagent is stable for 6 months.

**Warning and Precautions**

Not for Medicinal Use. Read the SDS carefully before beginning the protocol. Wear protective gloves/protective clothing/eye protection/face protection. Follow good clinical laboratory practices while handling clinical samples. Standard precautions should be followed as per established guidelines. Safety guidelines may be referred in safety data sheets of the product.

**Performance and Evaluation**

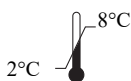
Performance of the solution is expected when the solution is stored at recommended temperature and within the expiry period.

**Safety Information**

The Carbonate Buffer for Coating is for laboratory use only, not for drug, household or other uses. Take appropriate laboratory safety measures and wear gloves and safety goggles when handling. Not compatible with disinfecting agents containing bleach. Please refer the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices

**Technical Assistance**

At HiMedia we pride ourselves on the quality and availability of our technical support. For any kind of technical assistance, mail at [mb@himedialabs.com](mailto:mb@himedialabs.com).



Storage temperature



Do not use if package is damaged



HiMedia Laboratories Private Limited,  
Reg. Off: Plot No. C-40, Road No. 21Y,  
MIDC, Wagle Industrial Area, Thane,  
(West) 400604, Maharashtra, INDIA.  
Web: [www.himedialabs.com](http://www.himedialabs.com)



03/2025

PIML222\_1/0322

ML222-01

**Disclaimer :**

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.