

Version 1 Last updated 14 August 2020

# ab270023

## Maleimide-R

## Phycoerythrin

A product of Expedeon, an  
Abcam company

Applicable to Expedeon product codes 403-0002, 403-0005.

View ab270023

Maleimide-Alkaline Phosphatase datasheet:

[www.abcam.com/ab270023](http://www.abcam.com/ab270023)

(use [www.abcam.cn/ab270023](http://www.abcam.cn/ab270023) for China, or [www.abcam.co.jp/ab270023](http://www.abcam.co.jp/ab270023) for Japan)

This product is for research use only and is not intended for  
diagnostic use.

## Table of Contents

1. Overview	2
2. Materials Supplied and Storage	2
3. Technical Considerations	3
4. Assay Procedure	3

### 1. Overview

Maleimide-R Phycoerythrin (ab270022) is designed to facilitate the conjugation of R Phycoerythrin to proteins, peptides and ligands that contain sulfhydryl (-SH) groups. The reactive maleimide group that has been added to R Phycoerythrin allows conjugation to be performed very efficiently at physiological pH.

### 2. Materials Supplied and Storage

Store product at -20°C upon receipt.

Item	Quantity	Storage temperature
Maleimide-R Phycoerythrin (lyophilized)	2 mg	-20°C

### 3. Technical Considerations

The buffer in which the thiolated molecule is dissolved should be in the pH range 6.5-7.5. Phosphate buffered saline pH 7.2 is commonly employed. EDTA (1-10 mM) may help to prevent metal catalyzed oxidation of thiols.

Please see the below table for recommended buffer conditions and components:

Buffer components	Compatibility
pH range 6.5-7.5	Yes
Chelating agents (e.g. EDTA)	Yes
Primary amines	Yes
Reducing reagents	No
Sodium Azide	< 0.1%

Molecules that do not contain -SH groups can be chemically modified to introduce the required thiol functionality. Abcam offers a thiolation kit (ab270020) compatible with this product. In the case of antibodies, disulfide (S-S) bridges may also be cleaved to release free thiols.

Any reducing reagent (e. g. dithiothreitol and  $\beta$ -mercaptoethanol) used to produce free thiols should be removed before proceeding with the conjugation.

### 4. Assay Procedure

- 4.1 Allow the vial of Maleimide-R Phycoerythrin to warm to room temperature in the dark.
- 4.2 Remove the crimp seal and reconstitute the lyophilized powder by adding a buffered solution of the thiol-containing molecule. Gently agitate the vial to ensure thorough dissolution.
- 4.3 Incubate for 3-4 hours (or overnight) at room temperature and then store at +4°C in the dark.

# Technical Support

Copyright © 2020 Abcam. All Rights Reserved. The Abcam logo is a registered trademark. All information / detail is correct at time of going to print.

**For all technical or commercial enquiries please go to:**

[www.abcam.com/contactus](http://www.abcam.com/contactus)

[www.abcam.cn/contactus](http://www.abcam.cn/contactus) (China)

[www.abcam.co.jp/contactus](http://www.abcam.co.jp/contactus) (Japan)