

Rev05  
Update: Nov,15,2022

**DATASHEET**

# Anti-Pertuzumab Antibody (1A3), mAb, Mouse

Cat. No.: A02150

## Overview

<b>Specificity</b>	This product is specific for Pertuzumab
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Pertuzumab
<b>Species Reactivity</b>	Not applicable
<b>Conjugate</b>	Unconjugated

## Applications

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

<b>Application</b>	<b>Recommended Usage</b>
ELISA	0.005-0.1 µg/ml
Competitive ELISA	1-15 µg/ml

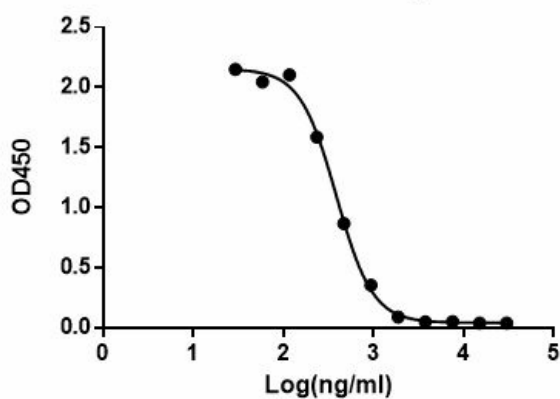
## Properties

<b>Form</b>	Lyophilized
<b>Storage Buffer</b>	This product is lyophilized with PBS, pH 7.2, containing 0.02% sodium azide.
<b>Reconstitution</b>	Reconstitute the lyophilized antibody with deionized water (or equivalent) to a final concentration of 0.5 mg/mL.
<b>Storage Instructions</b>	The lyophilized product remains stable for up to 1 year at -20 °C from the date of receipt. Upon reconstitution, it can be stored for 2-3 weeks at 2-8 °C or for up to 12 months at -20 °C or below. Avoid repeated freezing and thawing cycles.
<b>Purification</b>	Protein A chromatography

Isotype	IgG1,K
Clonality	Monoclonal
Clone ID	1A3
Note	GenScript can customize this product per customer's request including product size, buffer components, etc.

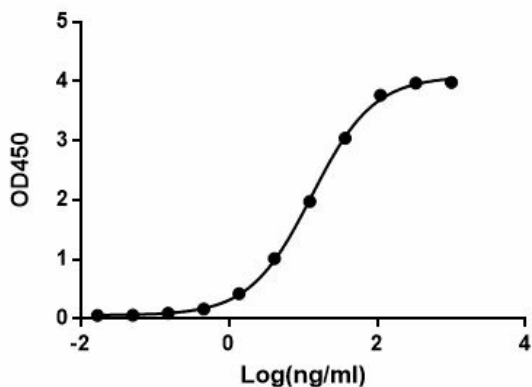
## Examples

**Anti-Pertuzumab Antibody (1A3) blocks Pertuzumab binding with HER2**



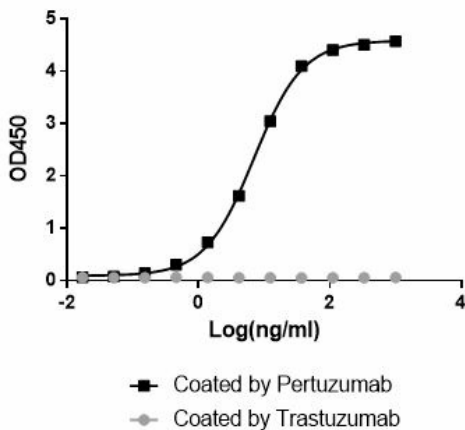
**Figure 1.** The potency of Anti-Pertuzumab Antibody (1A3) (GenScript, A02150-40) at blocking Pertuzumab binding with Human HER2 recombinant protein was tested using ELISA. The coating antigen was Pertuzumab at 1  $\mu\text{g}/\text{mL}$  concentration. The final concentration of HER2 recombinant protein was 200  $\text{ng}/\text{mL}$ . The anti-Pertuzumab antibody dilutions started from 30  $\mu\text{g}/\text{mL}$ .  $\text{IC}_{50}$  = 0.387  $\mu\text{g}/\text{mL}$  was observed.

**Anti-Pertuzumab Antibody (1A3) binds with Pertuzumab**

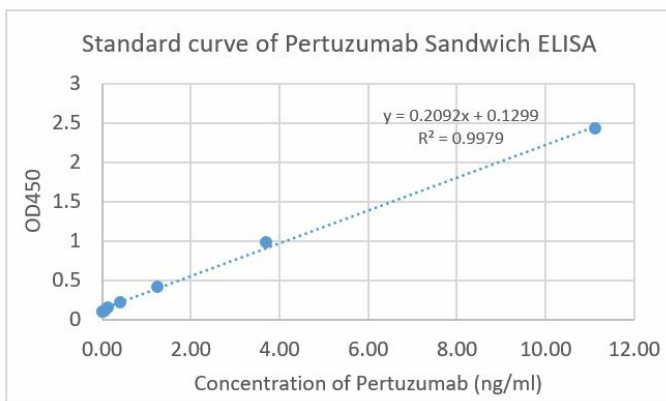


**Figure 2.** The affinity of binding of Anti-Pertuzumab Antibody (1A3), mAb, Mouse (GenScript, A02150-40) with Pertuzumab was analyzed using ELISA. The coating antigen was Pertuzumab at 1  $\mu\text{g}/\text{mL}$  concentration. The Anti-Pertuzumab Antibody (1A3), mAb, Mouse (GenScript, A02150-40) was used at dilutions starting from 1,000  $\text{ng}/\text{mL}$ .  $\text{EC}_{50}$  = 13.1  $\text{ng}/\text{mL}$  was observed. The Anti-Pertuzumab Antibody (1A3), mAb, Mouse (GenScript, A02150-40) did not recognize human IgG (data not shown).

### A02150 binds with Trastuzumab and Pertuzumab



**Figure 3.** The binding of Anti-Pertuzumab Antibody (1A3), mAb, Mouse (GenScript, A02150-40) with Trastuzumab and Pertuzumab was tested using ELISA. The coating antigen was Pertuzumab at 1 µg/mL concentration, or Trastuzumab at 1 µg/mL concentration. The Anti-Pertuzumab Antibody (1A3), mAb, Mouse (GenScript, A02150-40) was used at dilutions starting from 1,000 ng/mL. The results show that the antibody does not recognize Trastuzumab.



**Figure 4.** A standard curve of Pertuzumab Sandwich ELISA was generated. The Pertuzumab Sandwich ELISA assay was developed by using Anti-Pertuzumab Antibody (1A3), mAb, Mouse (GenScript, A02150-40; 1 µg/mL) and Anti-Pertuzumab Antibody (11H4), mAb, Mouse (GenScript, A02151-40; 1 µg/mL) as the capture and detection antibodies, respectively. In this ELISA assay, Anti-Pertuzumab Antibody (11H4), mAb, Mouse (GenScript, A02151-40) was labeled with Biotin. The sensitivity of detecting Pertuzumab is up to 0.499 ng/mL. GenScript can provide customized conjugation services for this product per the customer's request.

## Background

**Target Background :** Pertuzumab (also called 2C4, trade name Perjeta) is a monoclonal antibody used in combination with trastuzumab and docetaxel for the treatment of metastatic HER2-positive breast cancer; it is also used in the same combination as a neoadjuvant in early HER2-positive breast cancer. The epitope for pertuzumab is the domain of HER2 where it binds to HER3, and pertuzumab prevents the HER2/HER3 dimer from forming, which in turn blocks signaling by the dimer and as a result prevents HER2 from functioning. Anti-Pertuzumab Antibody (1A3), mAb, Mouse is produced from a hybridoma resulting from the fusion of partner and B-lymphocytes obtained from a mouse immunized with Pertuzumab.

**Synonyms :** Mouse monoclonal to Pertuzumab

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**