

## DATASHEET

Version: 2016-08-17

### THE™ ADP Antibody, mAb, Mouse

**Cat. No.:** A01799-100

**Size:** 100 µg

**Synonyms:** ADP Antibody, mAb, Mouse

#### Description:

Adenosine diphosphate (ADP) is the product of adenosine triphosphate (ATP) dephosphorylation by ATPases. It is an important intermediate in cellular metabolism as the partially dephosphorylated form of ATP. ADP is 5'-adenylic acid with an additional phosphate group attached through a pyrophosphate bond. Its molecular formula is C<sub>10</sub>H<sub>15</sub>N<sub>5</sub>O<sub>10</sub>P<sub>2</sub> with the molecular weight of 427.201 g/mol. ADP immunoassay is a useful method for screening the activity of kinases and other ATPases. An ADP antibody is a key reagent for ADP immunoassays such as ELISA and TR-FRET.

**GenScript THE™ ADP Antibody, mAb, Mouse** is produced from the hybridoma resulting from the fusion of SP2/0-Ag14 myeloma and B-lymphocytes harvested from mouse immunized with ADP conjugated to KLH.

**Immunogen:** ADP conjugated to KLH

**Host:** Mouse

**Conjugation:** Unconjugated

#### Formulation:

0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02% sodium azide.

**Clone:** 9B2B9

**Ig Subclass:** IgG1,κ

**Specificity:** The specificity of the antibody is defined as the ratio of antigen concentration to cross-reactant concentration at 50% inhibition of maximum binding (EC<sub>50</sub>). The cross-reactivity data obtained in a competitive ELISA system is as follows:

Cross Compound reactivity with ADP%	
ADP	100

GDP	53.33
ATP	7.11
GTP	4.37
cAMP	0.47
CTP	0.03
cGMP	0.01
GMP	0.0085
cIMP	0.005
AMP	< 0.0001
UMP	< 0.0001
cTMP	< 0.0001

**Purification:** Protein A affinity column

#### Applications:

Working concentrations for specific applications should be determined by the investigators. 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.

**Competitive ELISA:** 0.001-0.01 µg/ml.

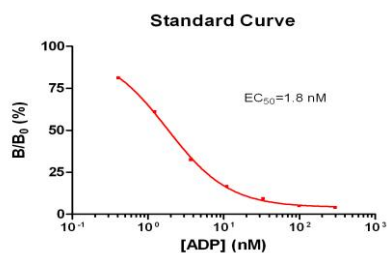
**Other applications:** user-optimized

#### Reconstitution:

Reconstitute the lyophilized product with deionized water (or equivalent) to a final antibody concentration of 0.5 mg/ml.

#### Storage:

The lyophilized product remains stable up to 1 year at -20 °C from 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.

**Example**

Competitive ELISA of ADP standard curve using **THE™ ADP Antibody, mAb, Mouse** (GenScript, A01799)