BellBrook Labs

certificate of analysis

Transcreener® ADP² FP Assay

Part number 3010-10K
Lot number 13851

Kit Component List and Storage Requirements:

Description	Part number	Lot number	Composition	Volume	Storage
ADP Alexa633 Tracer, 400 nM	2013	13263I	AlexaFluor® 633 labeled tracer in 2 mM HEPES (pH 7.5), 0.01% Brij-35	1 mL	-20°C
ADP² Antibody	2054	13278N	3.2 mg/mL monoclonal antibody in PBS, pH 7.2 with 10% Glycerol	3.6 mL	-20°C
Stop & Detect Buffer B, 10X	2032	13734D	200 mM HEPES, 0.2% Brij-35, 400 mM EDTA, pH 7.5	10 mL	-20°C
5 mM ADP	2055	13703F	5 mM ADP in deionized water, pH 7.0	2 mL	-20°C
5 mM ATP	2056	13812B	5 mM ATP in deionized water, pH 7.0	2 mL	-20°C

NOTE: Store reagents at –20ºC. Individual reagents tolerate 10 freeze-thaw cycles.

Antibody Performance at 1 µM ATP:

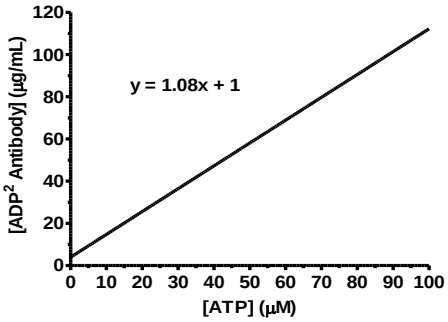

Figure 1: Linear Relationship between [ATP] and [ADP² Antibody]. The relationship between [ATP] and [ADP² Antibody is linear. (Though shown for 0.1 µM and 100 µM ATP; the relationship is valid to 1,000 µM ATP.) Therefore the quantity of ADP² Antibody for enzyme reactions that use between 0.1 µM and 1,000 µM ATP can be determined using the equation (y = mx + b; where x = [ATP] (µM) in the 10 µL enzyme reaction, y = [ADP² Antibody] (µg/mL) in the 10 µL detection mixture, m (slope) = 1.08, and b (y-intercept) = 1). We recommend a final volume of 20 µL.

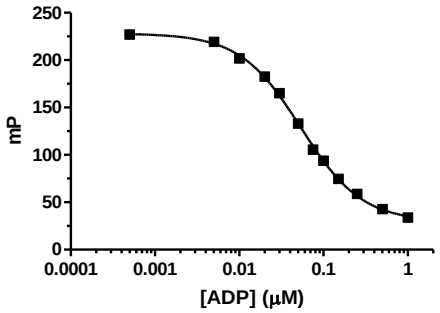

Figure 2: 1 µM ATP/ADP Standard Curve. A 10 µL standard curve was performed in enzyme reaction buffer (50 mM HEPES (pH 7.5), 4 mM $MgCl_2$, 2 mM EGTA, 0.01% Brij-35, 1% DMSO, and nucleotide) followed by the addition of 10 µL of ADP Detection Mixture containing 2.1 µg/mL of ADP² Antibody. The reaction was allowed to incubate in a Corning® low-volume 384-well plate (#4514) for 1 hour prior to reading on a Tecan Safire²™ using the instrument settings indicated in the product literature.

User Notification