

## Technical Data Sheet

## AKP Rat Anti-Mouse IgG2a

## Product Information

Material Number:	553389
Size:	1.0 ml
Clone:	R19-15
Immunogen:	Pooled BALB/c and C57BL/6 mouse Ig
Isotype:	Rat (LOU) IgG1, $\kappa$
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing BSA and $\leq 0.09\%$ sodium azide.

## Description

The R19-15 antibody recognizes an epitope in the CH3 domain of mouse IgG2a, with strong reactivity to the *Igh-I[a]* allotype and weaker reactivity to *Igh-I[b]*. It does not react with other Ig isotypes. Molecular genetic analyses suggest that the *Igh-I[b]* allele, which encodes *IgG2a[b]*, is derived from a locus found in several wild mouse subspecies, but not domestic mice, which encodes the IgG2c isotype.

This antibody is routinely tested by ELISA analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with AKP under optimum conditions, and unconjugated antibody and free AKP were removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

## Application Notes

## Application

ELISA	Routinely Tested
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## Recommended Assay Procedure:

This antibody has been tested as a detecting reagent in ELISA (1:1000 dilution) to assure specificity and reactivity. For the sandwich mouse IgG2a ELISA, AKP-conjugated R19-15 mAb is optimal for detection with purified anti-mouse IgG2a R11-89 mAb (Cat. No. 553446) for capture. This pair of anti-mouse IgG2a mAbs can effectively quantitate mouse IgG2a of these mouse Igh-C allotypes, in order of sensitivity from highest to lowest: *e*, *a*, *j*, and *b*.

## Suggested Companion Products

Catalog Number	Name	Size	Clone
553446	Purified Rat Anti-Mouse IgG2a	0.5 mg	R11-89

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

## References

- Martin RM, Silva A, Lew AM. The Igh-1 sequence of the non-obese diabetic (NOD) mouse assigns it to the IgG2c isotype. *Immunogenetics*. 1997; 46(2):167-168. (Biology)
- Morgado MG, Cam P, Gris-Liebe C, Cazenave PA, Jouvin-Marche E. Further evidence that BALB/c and C57BL/6 gamma 2a genes originate from two distinct isotypes. *EMBO J*. 1989; 8(11):3245-3251.(Biology)

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