

## Commercially Available Anti-Ig Monoclonal Antibodies

### *Reactivity and specificity for nonhuman primate Ig*

- [40 anti-human Ig monoclonal antibodies](#) were tested for reactivity and specificity for rhesus (Indian-origin *Macaca mulatta*) immunoglobulin heavy chain classes, light chains and IgG subclasses.
- We also tested anti-IgG monoclonals for reactivity with IgG purified from serum of [7 different primate species](#).
- Our recommendations for cross-reactive antibodies are shown below. Click on 'category' for more detailed results from this testing or [here](#) for testing methods.

### *Anti-rhesus 'Best in Class'*

	Clone	Source	Comment
<a href="#">IgA*</a>	GA112	Life Technologies	Some reactivity with IgG
	A9604D2	Beckman Coulter	Also reactive with IgG
<a href="#">IgG*</a>	HP6017	Life Technologies	Also reactive with IgA Detects all subclasses
	G18-145	BD Bioscience	Detects all subclasses
	H2	Beckman Coulter	Detects IgG1, IgG2 and IgG3
	JDC-10	Beckman Coulter	Detects IgG1, IgG2 and IgG3
	IS11-3B2.2.3	Miltenyi	Detects only IgG1
<a href="#">IgM</a>	G20-127	BD Bioscience	Some reactivity with IgG
	UHB	Beckman Coulter	Some reactivity with IgG
	SA-DA4	Beckman Coulter	Also reactive with IgG
<a href="#">Kappa</a>	G20-193	BD Bioscience	Weak but specific
<a href="#">Lambda</a>	JDC-12	BD Bioscience	
	IS7-24C7	Miltenyi	
<a href="#">IgG1*</a>	IS11-3B2.2.3	Miltenyi	Reacts with all human subclasses but only rhesus IgG1
<a href="#">IgG2*</a>	---		None are subclass specific
<a href="#">IgG3*</a>	---		None are subclass specific
<a href="#">IgG4</a>	---		None are subclass specific

\* NHP Reagent Resource has other class-specific, subclass-specific and species-specific mAbs

## Commercial Anti-Ig Antibodies Tested

Target	Clone	Source	Form
IgA	GA112	Life Technologies	HRP
	G20-359	BD Bioscience	Biotin
	B3506B4	Beckman Coulter	HRP
	A9604D2	Beckman Coulter	HRP
	IS11-8E10	Miltenyi	Biotin
	IS11-21E11	Miltenyi	Biotin
IgG	HP6017	Life Technologies	HRP
	G18-145	BD Bioscience	HRP
	H2	Beckman Coulter	HRP
	JDC-10	Beckman Coulter	HRP
	IS11-3B2.2.3	Miltenyi	Biotin
IgM	HP6085	Life Technologies	HRP
	G20-127	BD Bioscience	Biotin
	UHB	Beckman Coulter	HRP
	SA-DA4	Beckman Coulter	HRP
	PJ2-22H3	Miltenyi	Biotin
Kappa	HP6053	Life Technologies	HRP
	G20-193	BD Bioscience	Biotin
	IS11-24D5	Miltenyi	Biotin
Lambda	JDC-12	BD Bioscience	Biotin
	JDC-12	Beckman Coulter	HRP
	IS7-24C7	Miltenyi	Biotin
IgG1	HP6069	Life Technologies	HRP
	HP6070	Life Technologies	HRP
	G17-1	BD Bioscience	Biotin
	4E3	Beckman Coulter	HRP
	IS11-12E4.23.20	Miltenyi	Biotin
IgG2	HP6014	Life Technologies	HRP
	G18-21	BD Bioscience	Biotin
	31-7-4	Beckman Coulter	HRP
	HP6002	Beckman Coulter	HRP
	HP6014	Beckman Coulter	HRP
IgG3	HP6047	Life Technologies	Biotin
	HP6050	Beckman Coulter	HRP
IgG4	HP6025	Life Technologies	HRP
	HP6023	Life Technologies	HRP
	JDC-14	BD Bioscience	Biotin
	HP6023	Beckman Coulter	HRP
	HP6025	Beckman Coulter	HRP

## Methods used for anti-Ig testing

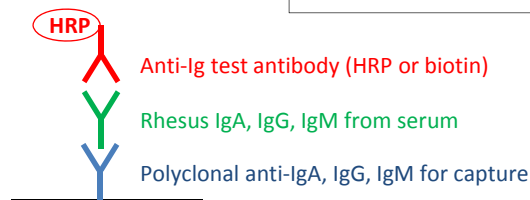
ELISA assays were used for all anti-Ig testing employing either HRP-conjugated or biotinylated primary mAbs. When biotinylated forms were used, binding was detected using avidin-HRP and standard TMB chemistry.

All primary antibodies were tested at 10X, 1X and 0.1X manufacturer's recommended concentration. Results were scored as follows:

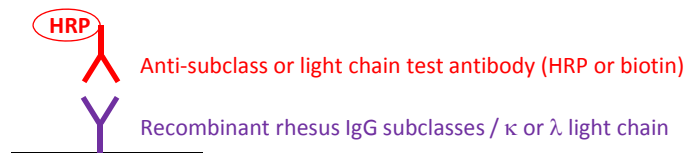
+++	>2X background at 0.1X
++	>2X background at 1X
+	>2X background at 10X
+/-	<2X background any X
-	background

### ELISA formats

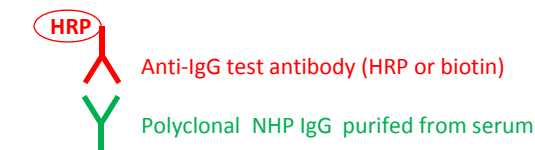
FOR ANTI-IG CLASS-SPECIFIC MABS



FOR ANTI-IG SUBCLASS OR ISOTYPE-SPECIFIC MABS



FOR SPECIES CROSS REACTIVITY



## Anti-Rhesus Ig Class

Target	Clone	Source	Form	Rhesus			Human		
				IgA	IgG	IgM	IgA	IgG	IgM
Anti-IgA	* GA112	Life Technologies	HRP	+++	++	+/-	+++	+	+/-
	G20-359	BD Bioscience	Bio	-	-	-	-	-	-
	B3506B4	Beckman Coulter	HRP	-	-	-	+++	+/-	-
	* A9604D2	Beckman Coulter	HRP	+++	+++	-	+++	+	-
	IS11-8E10	Miltenyi	Bio	-	-	-	+++	-	-
	IS11-21E11	Miltenyi	Bio	-	-	-	+++	-	-
Anti-IgG	* HP6017	Life Technologies	HRP	+++	+++	+	+++	+++	+/-
	* G18-145	BD Bioscience	HRP	-	+++	-	-	+++	-
	* H2	Beckman Coulter	HRP	+	+++	-	-	+++	-
	* JDC-10	Beckman Coulter	HRP	-	+++	-	+	+++	-
	* IS11-3B2.2.3	Miltenyi	Bio	-	+++	-	-	+++	-
Anti-IgM	HP6085	Life Technologies	HRP	-	+	-	-	+/-	+++
	* G20-127	BD Bioscience	Bio	+/-	++	+++	-	+/-	+++
	* UHB	Beckman Coulter	HRP	-	+	++	+	+	+++
	* SA-DA4	Beckman Coulter	HRP	-	+++	+++	-	+	+++
	PJ2-22H3	Miltenyi	Bio	+	-	+/-	+/-	-	+++

\* Recommended

## Anti-Rhesus Light Chain

Target	Clone	Source	Form	Rhesus		Human	
				Kappa	Lambda	Kappa	Lambda
Anti-Kappa	HP6053	Life Technologies	HRP	++	++	+++	+
	G20-193	BD Bioscience	Bio	+	-	+++	-
	IS11-24D5	Miltenyi	Bio	+/-	-	++	-
Anti-Lambda	* JDC-12	BD Bioscience	Bio	-	+++	-	+++
	JDC-12	Beckman Coulter	HRP	+/-	++	+/-	++
	* IS7-24C7	Miltenyi	Bio	-	+++	-	+++

\* Recommended

## Anti-Rhesus Sub-class

Target	Clone	Company	Form	Rhesus				Human			
				IgG1	IgG2	IgG3	IgG4	IgG1	IgG2	IgG3	IgG4
Anti-IgG1	HP6069	Life Technologies	HRP	++	++	-	-	++	-	-	+
	HP6070	Life Technologies	HRP	+++	++	-	-	+++	-	-	-
	G17-1	BD Bioscience	Bio	-	-	++	++	+++	-	-	-
	4E3	Beckman Coulter	HRP	+++	+++	+	-	+++	+	-	+
	IS11-12E4.23.20	Miltenyi	Bio	-	-	-	-	+++	+++	+++	+++
	* IS11-3B2.2.3	Miltenyi	Bio	+++	-	-	-	+++	+++	+++	+++
Anti-IgG2	G18-21	BD Bioscience	Bio	-	+	-	-	-	+++	+	-
	31-7-4	Beckman Coulter	HRP	+	-	+	+	-	+++	-	-
	HP6002	Beckman Coulter	HRP	-	+	+	-	+	+++	+	+
	HP6014	Beckman Coulter	HRP	-	-	-	-	-	++	-	-
Anti-IgG3	HP6047	Life Technologies	Bio	-	-	+	-	+	+	+++	+
	HP6050	Beckman Coulter	HRP	+++	-	-	-	-	+/-	+++	-
Anti-IgG4	HP6025	Life Technologies	HRP	-	-	-	-	-	-	-	+++
	HP6023	Life Technologies	HRP	+	-	-	-	-	-	-	+++
	JDC-14	BD Bioscience	Bio	+	-	-	+	-	+/-	-	+++
	HP6023	Beckman Coulter	HRP	-	-	+/-	-	-	-	-	+++
	HP6025	Beckman Coulter	HRP	-	-	-	-	-	+/-	-	+++

\* Recommended

Common name	Genus species
Chimpanzee	<i>Pan troglodytes</i>
Sooty mangabey	<i>Cercocebus torquatus</i>
African green (sabaeus monkey)	<i>Chlorocebus sabaeus</i>
Rhesus macaque	<i>Macaca mulatta</i>
Cynomolgus monkey	<i>Macaca fascicularis</i>
Pigtailed macaque	<i>Macaca nemestrina</i>
Marmoset	<i>Callithrix jacchus</i>

### Anti-IgG by Species

Clone	Source	Form	Human	Chimp	Mangabey	AGM	Rhesus	Cyno	Pigtail	Marmoset
			<i>Homo sapiens</i>	<i>Pan troglodytes</i>	<i>Cercocebus torquatus</i>	<i>Chlorocebus sabaeus</i>	<i>Macaca mulatta</i>	<i>Macaca fascicularis</i>	<i>Macaca nemestrina</i>	<i>Callithrix jacchus</i>
HP6017	Life Technologies	HRP	+++	+++	+++	+++	+++	+++	+++	+
G18-145	BD Bioscience	HRP	+++	+++	+++	+++	+++	+++	+++	-
H2	Beckman Coulter	HRP	+++	+++	+++	+++	+++	+++	+++	-
JDC-10	Beckman Coulter	HRP	+++	+++	+	-	+++	-	+	-
IS11-3B2.2.3	Miltenyi	Bio	+++	+++	+++	+++	+++	+++	+++	-