



Octet® BLI Biosensor Selection Guide

Simplifying Progress

SARTORIUS

Octet® BLI Biosensors: Overview

Biosensor	Description	Intended Use [†]	Application	Specificity	Protein Tag (capture)	Regenerable	Suggested Molecule
AHC	Anti-Human Fc-Capture		Human IgG or Fc-fusion capture	Human 	IgG / Fc Domain		 
AHC2	Anti-Human Fc-Capture 2nd Generation	 	Human IgG or Fc-fusion capture	Human 	IgG / Fc Domain	 	 
AHQ	Anti-Human IgG Fc		Human IgG or Fc-fusion capture	Human 	IgG / Fc Domain		 
AMC	Anti-Mouse Fc-Capture		Mouse IgG or Fc-fusion capture	Mouse 	IgG / Fc Domain		 
AMC2	Anti-Murine IgG Capture 2nd Generation	 	Mouse IgG or F(ab')2 capture	Mouse 	IgG / F(ab')2	 	 
AMQ	Anti-Murine IgG Fv		Mouse IgG or F(ab')2 capture	Mouse 	IgG / F(ab')2		 
APS	Aminopropylsilane		Lipids, liposome and hydrophobic proteins capture	Various	N/A		
ARC	Anti-Rabbit Fc-Capture	 	Rabbit IgG or Fc-fusion capture	Rabbit 	IgG / Fc Domain	 	 
AR2G	Amine Reactive 2G		Amine coupling	Various	N/A		 
DYKDDDDK	Anti-FLAG®	 	FLAG®-tagged proteins capture	Various	FLAG® tag	 	 
FAB2G	Anti-Human Fab-CH1 2nd Generation	 	Human IgG or Fab-CH1 capture	Human 	CH1	 	 
GST	Anti-GST	 	GST capture	Various	GST	 	 
HIS1K	Anti-Penta-HIS	 	His-tagged proteins capture	Various	His tag		 
HIS2	Anti-HIS		His-tagged proteins capture	Various	His tag		 
NTA	Ni-NTA	 	His-tagged proteins capture	Various	His tag	 	 
ProA	Protein A		Various species IgG capture	Various	IgG		 
ProA-MAX	High Titer Protein A		Quantitation of High Titer IgGs	Various	IgG		 

Biosensor	Description	Intended Use ¹		Application	Specificity	Protein Tag (capture)	Regenerable	Suggested Molecule
ProG	Protein G			Various species IgG capture	Various	IgG		
ProL	Protein L			Various species IgG capture	Various	IgG		
SA	Streptavidin			Immobilization of biotinylated molecules	Various	Biotin, AviTag™		
SAX	High Precision Streptavidin			Immobilization of biotinylated molecules	Various	Biotin, AviTag™		
SAX2	High Precision Streptavidin 2.0			Immobilization of biotinylated molecules	Various	Biotin, AviTag™		
SSA	Super Streptavidin			Immobilization of biotinylated molecules	Various	Biotin, AviTag™		
VHH	Anti-VHH			VHH capture	Camelid	N/A		
AAVX	AAV Quantitation			Quantitation of AAV Capsids	Human	N/A		

Kinetics
 Quantitation
 Glycan Screening
 Impurity Testing
 Yes for Kinetics
 Yes for Quantitation
 No for Quantitation
 Protein and analyte dependent

Proteins
 Antibodies
 Small Molecules
 Lipid | liposome
 DNA

¹ Biosensors are developed, manufactured, and QC is performed for their intended applications; using biosensors outside their intended purpose requires user validation

Octet® BLI Consumables: In Depth

Octet® Consumables	Description	Intended Use ²	Application	Octet® BLI System Quantitation Dynamic Range ¹			Regeneration
				Octet® QK ³ , QK384 ³ , RH96 ≥32 Channel	Octet® RED96e ³ , K2 ³ , R2, R4, R8, RH16, RH96 8 or 16 Channel	Octet® N1	
Biosensors							
AHC (Cat. Nos. 18-5060, 18-5063, 18-5064)	Anti-Human Fc-Capture		Capturing human IgG's or human Fc-fusion proteins for kinetic analysis with various analytes	N/A	N/A	N/A	
AHC2 (Cat. Nos. 18-5142, 18-5143, 18-5144)	Anti-Human Fc-Capture 2nd Generation	 	Capturing human IgG's or human Fc-fusion proteins for both kinetic and quantitation analysis	0.5-2000 µg/mL	0.1-2000 µg/mL	0.5-4000 µg/mL	 
AHQ (Cat. Nos. 18-5001, 18-5004, 18-5005)	Anti-Human IgG Fc		Quantitation measurements of human IgG's or human Fc-fusion proteins	0.025-200 µg/mL	0.01-200 µg/mL	0.25-500 µg/mL	
AMC (Cat. Nos. 18-5088, 18-5089, 18-5090)	Anti-Mouse Fc-Capture		Capturing mouse IgG's or mouse Fc-fusion proteins for kinetic analysis with various analytes	N/A	N/A	N/A	
AMC2 (Cat. Nos. 18-5163, 18-5164, 18-5165)	Anti-Murine IgG Capture 2nd Generation	 	Capture of murine IgG's or F(ab'2) for both kinetic and quantitation analysis	0.025-8000 µg/mL	0.025-8000 µg/mL	0.025-8000 µg/mL	 
AMQ (Cat. Nos. 18-5022, 18-5023, 18-5024)	Anti-Murine IgG Fv		Quantitation measurements of mouse IgG's or mouse F (ab')2	0.05-200 µg/mL	0.025-200 µg/mL	0.5-500 µg/mL	
APS (Cat. Nos. 18-5045, 18-5046, 18-5047)	Amino-propylsilane		Binding measurement of lipids, liposomes, hydrophobic proteins that don't have other methods of surface attachment	N/A	N/A	N/A	
ARC (Cat. Nos. 18-5168, 18-5169, 18-5170)	Anti-Rabbit Fc-Capture	 	Capturing rabbit IgG's or rabbit Fc-fusion proteins for both kinetic and quantitation analysis	0.05-4000 µg/mL	0.05-4000 µg/mL	0.05-4000 µg/mL	 
AR2G (Cat. Nos. 18-5092, 18-5093, 18-5094)	Amine Reactive 2G		Covalently immobilizing any molecule with a terminal amine group for all kinetic analyses	N/A	N/A	N/A	
DYKDDDDK (Cat. Nos. 18-5187, 18-5188, 18-5189)	Anti-FLAG®	 	Capture of crude or purified DYKDDDDK (FLAG®)-tagged protein for kinetic and quantitation analysis	Analyte dependent, typically 0.5-100 µg/mL	Analyte dependent, typically 0.5-100 µg/mL	N/A	 

Octet® BLI Consumables: In Depth (con't)

Octet® Consumables	Description	Intended Use²	Application	Octet® BLI System Quantitation Dynamic Range¹			Regeneration	
				Octet® QK³, QK384³, RH96 ≥32 Channel	Octet® RED96e³, K2³, R2, R4, R8, RH16, RH96 8 or 16 Channel	Octet® N1		
Biosensors								
FAB2G (Cat. Nos. 18-5125, 18-5126, 18-5127)	Anti-Human Fab-CH1 2nd Generation	 	Kinetic analysis of human Fab fragments and IgG with target antigen, Fc receptors, or other analytes. Quantitation of Fab and IgG	Analyte dependent, typically 0.5–1000 µg/mL	Analyte dependent, typically 0.5–1000 µg/mL	Analyte dependent, typically 0.5–1000 µg/mL	 	
GST (Cat. Nos. 18-5096, 18-5097, 18-5098)	Anti-GST	 	Quantitation of GST-tagged proteins, direct capturing of GST-tagged proteins for kinetic analyses with analytes	Protein dependent, typically 0.1–2000 µg/mL	Protein dependent, typically 0.1–2000 µg/mL	Protein dependent, typically 0.5–1000 µg/mL**	 	
HIS1K (Cat. Nos. 18-5120, 18-5121, 18-5122)	Anti-Penta-HIS	 	Capture of His-tagged proteins for kinetic analysis with target analytes. Quantitation of His-tagged proteins in buffer, media or diluted lysate. Biosensor is pre-coated with Penta-His antibody from Qiagen	Protein dependent, typically 0.25–200 µg/mL*	Protein dependent, typically 0.25–200 µg/mL*	Protein dependent, typically 10–200 µg/mL*		
HIS2 (Cat. Nos. 18-5114, 18-5115, 18-5116)	Anti-HIS		Quantitation of HIS-tagged proteins in crude matrices or buffer or column eluent (pre-coated with anti-His Ab from MBS)	Protein and protocol (time and rpm) dependent, 0.1–200 µg/mL**	Protein and protocol (time and rpm) dependent, 0.1–200 µg/mL**	Protein dependent, typically 0.1–200 µg/mL**		
NTA (Cat. Nos. 18-5101, 18-5102, 18-5103)	Ni-NTA	 	Quantitation of HIS-tagged proteins in buffer or diluted matrix, capturing of HIS-tagged proteins for kinetic analyses with various analytes	Protein dependent, typically 0.5–1000 µg/mL	Protein dependent, typically 0.5–1000 µg/mL	Protein dependent, typically 0.5–1000 µg/mL	 	
ProA (Cat. Nos. 18-5010, 18-5012, 18-5013)	Protein A		Quantitation of IgG’s of various species including human	0.1–700 µg/mL	0.025–2000 µg/mL	0.5–4000 µg/mL		
ProA-MAX (Cat. Nos. 18-5184, 18-5185, 18-5186)	High Titer Protein A		Quantitation of high titer IgG’s of various species, including hIgG1 and polyclonal hIgG	100–12000 µg/mL	100–12000 µg/mL	N/A		
ProG (Cat. Nos. 18-5082, 18-5083, 18-5084)	Protein G		Quantitation of IgG’s of various species including human	0.1–700 µg/mL	0.025–2000 µg/mL	0.5–4000 µg/mL		
ProL (Cat. Nos. 18-5085, 18-5086, 18-5087)	Protein L		Quantitation of IgG’s of various species via the kappa light chain	0.1–700 µg/mL	0.05–2000 µg/mL	0.5–2000 µg/mL		

Octet® BLI Consumables: In Depth (con't)

Octet® Consumables	Description	Intended Use ²	Application	Octet® BLI System Quantitation Dynamic Range ¹			Regeneration
				Octet® QK®, QK384®, RH96 ≥32 Channel	Octet® RED96e®, K2®, R2, R4, R8, RH16, RH96 8 or 16 Channel	Octet® N1	
Biosensors							
SA (Cat. Nos. 18-5019, 18-5020, 18-5021)	Streptavidin		Immobilizing biotinylated molecules for all kinetic analyses	N/A	N/A	N/A	
SAX (Cat. Nos. 18-5117, 18-5118, 18-5119)	High Precision Streptavidin	 	Immobilizing biotinylated molecules for high precision quantitation and kinetic measurements	Protein dependent	Protein dependent	Protein dependent	
SAX2 (Cat. Nos. 18-5136, 18-5137, 18-5138)	High Precision Streptavidin 2.0	 	Immobilizing biotinylated molecules for high precision and reproducible kinetic characterization and custom quantitation	Protein dependent	Protein dependent	Protein dependent	
SSA (Cat. Nos. 18-5057, 18-5065, 18-5070)	Super Streptavidin		Small molecule and fragment analyses only, should not be used for large molecule measurements	N/A	N/A	N/A	
AAVX (Cat. Nos. 18-5160, 18-5161, 18-5162)	AAV Quantitation		Quantitation of AAV Capsids for various AAV serotypes, including AAV1 -AAV9 and AAVrh10	AAV serotype and sample dependent, typically 8.5E8-1.0E13 vp/mL	AAV serotype and sample dependent, typically 8.5E8-1.0E13 vp/mL	AAV serotype and sample dependent, typically 8.5E8-1.0E13 vp/mL	
VHH (Cat. Nos. 18-5178, 18-5179, 18-5180)	Anti-VHH	 	Capturing alpaca, llama, camel and humanized VHH antibodies for both kinetic and quantitation analysis	Protein dependent, typically 0.04-100 µg/mL	Protein dependent, typically 0.04-100 µg/mL	Protein dependent, typically 0.04-100 µg/mL	 

 Kinetics
  Quantitation
  Glycan Screening
  Impurity Testing
  Yes for Kinetics
  Yes for Quantitation
  No for Quantitation
  Protein and analyte dependent

¹ Dynamic range might vary for different background conditions, numbers listed are guidelines only and are based on testing of intended analyte molecules, users should validate range for their own samples

² Biosensors are developed, manufactured, and QC is performed for their intended applications; using biosensors outside their intended purpose requires user validation

* Assay conditions and dynamic range should be validated

** Users should validate their assay

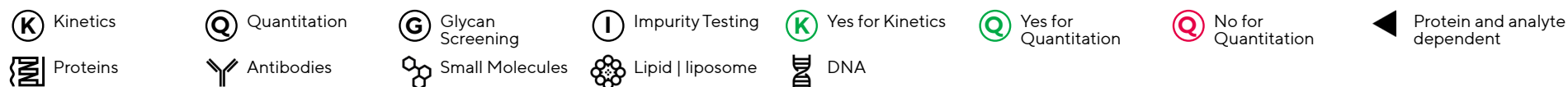
† Discontinued model

Octet® BLI Consumables: In Depth (con't)

Octet® Consumables	Description	Intended Use	Application	Octet® BLI System Quantitation Dynamic Range¹			Regeneration
				Octet® QK®, QK384®, RH96 ≥32 Channel	Octet® RED96®, K2®, R2, R4, R8, RH16, RH96 8 or 16 Channel	Octet® N1	
Kits and Reagents							
AR2G (Cat. No. 18-5095)	Amine Coupling 2nd Generation Reagent Kit	Ⓚ	Reagent kit for immobilizing any molecule with a terminal amine group onto Octet® AR2G biosensors	N/A	N/A	N/A	◀
GlyM (Cat. No. 18-5139)	Mannose Screening Kit	ⓐ	Relative screening of Mannose glycans in crude or purified cell culture samples	Sample dependent	Sample dependent	N/A	ⓐ
GlyS (Cat. No. 18-5135)	Sialic Acid Screening Kit	ⓐ	Relative screening of sialic acid in crude or purified cell culture samples	Sample dependent	Sample dependent	N/A	ⓐ
HCP (Cat. Nos. 18-5141, 18-5158)	Anti-CHO HCP Detection Kit	Ⓛ	High sensitivity assay kit for generic analyses of CHO HCP	Sample dependent, typically 0.5–200 ng/mL	Sample dependent, typically 0.5–200 ng/mL	N/A	ⓐ
RPA (Cat. No. 18-5128)	Residual Protein A Detection Kit	Ⓛ	High sensitivity assay kit for analyses of residual Protein A	Sample dependent, typically 0.1–25 ng/mL	Sample dependent, typically 0.1–25 ng/mL	N/A	ⓐ
Regeneration Buffer Kit (Cat. No. 18-5171)	Regeneration Buffer Kit	Ⓚ ⓐ	Set of four ready-to-use buffers for screening regeneration conditions for various Octet® Biosensors	N/A	N/A	N/A	◀
Kinetics Buffer 10X (Cat. No. 18-1105)	Optimized buffer matrix to be used in kinetics assays	N/A	Sartorius' Octet® Kinetics Buffer 10X (10x KB) is essential for kinetics applications performed on the Octet® platform with Octet® biosensors	N/A	N/A	N/A	N/A
ProA Calibrator Set (Cat. No. 18-1118)	Calibration of the Octet® ProA Biosensors	N/A	The Octet® ProA Calibrator Set is designed for calibrating Octet® ProA Biosensors and generating a standard curve for IgG titer measurement. The set includes eight calibrators with IgG concentrations ranging from 1 to 700 µg/mL	N/A	N/A	N/A	N/A
Octet® Sample Diluent (Cat. No. 18-1104)	Octet® sample dilution buffer for quantitation assays	N/A	Octet® sample dilution buffer for quantitation assays, 50mL. Contains Kathon	N/A	N/A	N/A	N/A

Accessories			
Octet[®] AT (Cat. No. 18-5159)	Biosensor Transfer Tool	N/A	The Octet [®] AT is a tool for Octet [®] BLI biosensor transfer. Its ergonomic design delivers exceptional comfort and makes biosensor pickup and release quick and easy
Octet[®] AS (Cat. No. OCTET-AS)	Offline Biosensor Immobilization Station	N/A	Simultaneous and Uniform reagent loading capable of simultaneously and uniformly loading reagents onto all 96 biosensors in a biosensor tray
Octet[®] AC (Cat. No. 18-5133)	Biosensor mount cleaning tray	N/A	Octet [®] AC is a biosensor mount cleaning tray for regular automated cleaning of metal biosensor mounts on Octet [®] RH96 and RH16 instruments
Octet[®] AE (Cat. No. 18-5152)	Evaporation Cover	N/A	The Octet [®] AE is an evaporation cover designed to minimize sample evaporation from 96-well plates, maintaining over 90% of the sample volume for up to 16 hours at 25°C
Octet[®] 96FW Microplates (Cat. Nos. 18-5172, 18-5173)	Black, flat-bottom, 96-well plates	N/A	The Octet [®] 96FW Microplates are black, polypropylene, 96-well flat-bottom plates for kinetic and quantitation analysis of biomolecules on Octet [®] BLI platform
Octet[®] 384TW Microplates (Cat. Nos. 18-5166, 18-5167)	Black, tilted-bottom, 384-well plates	N/A	The Octet [®] 384TW microplate are black, polypropylene, 384-well tilted-bottom plates for kinetic and quantitation analysis of biomolecules on Octet [®] RH16 and RH96 instruments

Icon Legend



Germany

Sartorius Lab Instruments GmbH & Co. KG
 Otto-Brenner-Strasse 20
 37079 Goettingen
 Phone +49 551 308 0

USA

Sartorius Corporation
 3874 Research Park Dr.
 Ann Arbor, MI 48108
 Phone +1 734 769 16006

For further contacts, visit
www.sartorius.com