Octet® BLI Biosensor Selection Guide

Simplifying Progress

SARTORIUS

Octet® BLI Biosensors: Overview

Biosensor	Description	Intended Use[1]	Application	Specificity	Protein Tag (capture)	Regenerable	Suggested Molecule
AHC	Anti-Human Fc-Capture	K	Human IgG or Fc-fusion capture	Human	IgG / Fc Domain	K	Antibodies, Proteins
AHC2	Anti-Human Fc-Capture 2nd Generation	K, Q	Human IgG or Fc-fusion capture	Human	IgG / Fc Domain	K, Q	Antibodies, Proteins
AHQ	Anti-Human IgG Fc	Q	Human IgG or Fc-fusion capture	Human	IgG / Fc Domain	Q	Antibodies, Proteins
AMC	Anti-Mouse Fc-Capture	K	Mouse IgG or Fc-fusion capture	Mouse	IgG / Fc Domain	K	Antibodies, Proteins
AMC2	Anti-Murine IgG Capture 2nd Generation	K, Q	Mouse IgG or F(ab')2 capture	Mouse	IgG / F(ab')2	K, Q	Antibodies, Proteins
AMQ	Anti-Murine IgG Fv	Q	Mouse IgG or F(ab')2 capture	Mouse	IgG / F(ab')2	Q	Antibodies, Proteins
APS	Aminopropylsilane	K	Lipids, liposome and hydrophobic proteins capture	Various	N/A	◀	Lipid | liposome
ARC	Anti-Rabbit Fc-Capture	K, Q	Rabbit IgG or Fc-fusion capture	Rabbit	IgG / Fc Domain	K, Q	Antibodies, Proteins
AR2G	Amine Reactive 2G	K	Amine coupling	Various	N/A	◀	Antibodies, Proteins
FAB2G	Anti-Human Fab-CH1 2nd Generation	K, Q	Human IgG or Fab-CH1 capture	Human	CH1	K, Q	Antibodies, Proteins
GST	Anti-GST	K, Q	GST capture	Various	GST	K, Q	Antibodies, Proteins
HIS1K	Anti-Penta-HIS	K, Q	His-tagged proteins capture	Various	His tag	K	Antibodies, Proteins
HIS2	Anti-HIS	Q	His-tagged proteins capture	Various	His tag	◀	Antibodies, Proteins
NTA	Ni-NTA	K, Q	His-tagged proteins capture	Various	His tag	K, Q	Antibodies, Proteins
ProA	Protein A	Q	Various species IgG capture	Various	IgG	Q	Antibodies, Proteins
ProG	Protein G	Q	Various species IgG capture	Various	IgG	Q	Antibodies, Proteins
ProL	Protein L	Q	Various species IgG capture	Various	IgG	Q	Antibodies, Proteins
SA	Streptavidin	K, Q	Immobilization of biotinylated molecules	Various	Biotin, AviTag™	◀	Antibodies, Proteins
SAX	High Precision Streptavidin	K, Q	Immobilization of biotinylated molecules	Various	Biotin, AviTag™	◀	Antibodies, Proteins
SAX2	High Precision Streptavidin 2.0	K, Q	Immobilization of biotinylated molecules	Various	Biotin, AviTag™	◀	Antibodies, Proteins
SSA	Super Streptavidin	K	Immobilization of biotinylated molecules	Various	Biotin, AviTag™	K	Small Molecules
AAVX	AAV Quantitation	Q	Quantitation of AAV Capsids	Human	N/A	Q	DNA

K Kinetics
Q Quantitation
G Glycan Screening
I Impurity Testing
K Yes for Kinetics
Q Yes for Quantitation
Q 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[e], QK384[], RH96 ≥32 Channel	Octet® RED96e[], K2[], 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	K		Capturing human IgG's or human Fc-fusion proteins for kinetic analysis with various analytes	N/A	N/A	N/A	K	
AHC2 (Cat. Nos. 18-5142, 18-5143, 18-5144)	Anti-Human Fc-Capture 2nd Generation	K	Q	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	K	Q
AHQ (Cat. Nos. 18-5001, 18-5004, 18-5005)	Anti-Human IgG Fc	Q		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	Q	
AMC (Cat. Nos. 18-5088, 18-5089, 18-5090)	Anti-Mouse Fc-Capture	K		Capturing mouse IgG's or mouse Fc-fusion proteins for kinetic analysis with various analytes	N/A	N/A	N/A	K	
AMC2 (Cat. Nos. 18-5163, 18-5164, 18-5165)	Anti-Murine IgG Capture 2nd Generation	K	Q	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	K	Q
AMQ (Cat. Nos. 18-5022, 18-5023, 18-5024)	Anti-Murine IgG Fv	Q		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	Q	
APS (Cat. Nos. 18-5045, 18-5046, 18-5047)	Aminopropylsilane	K		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	K	Q	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	K	Q
AR2G (Cat. Nos. 18-5092, 18-5093, 18-5094)	Amine Reactive 2G	K		Covalently immobilizing any molecule with a terminal amine group for all kinetic analyses	N/A	N/A	N/A	◀	
FAB2G (Cat. Nos. 18-5125, 18-5126, 18-5127)	Anti-Human Fab-CH1 2nd Generation	K	Q	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	K	Q
GST (Cat. Nos. 18-5096, 18-5097, 18-5098)	Anti-GST	K	Q	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**	K	Q
HIS1K (Cat. Nos. 18-5120, 18-5121, 18-5122)	Anti-Penta-HIS	K	Q	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*	K	
HIS2 (Cat. Nos. 18-5114, 18-5115, 18-5116)	Anti-HIS	Q		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**	◀	

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

Octet® Consumables	Description	Intended Use[2]	Application	Octet® BLI System Quantitation Dynamic Range[1]			Regeneration
				Octet® QK[e‡], QK384‡, RH96 ≥32 Channel	Octet® RED96e‡, K2‡, R2, R4, R8, RH16, RH96 8 or 16 Channel	Octet® N1	
Biosensors							
NTA (Cat. Nos. 18-5101, 18-5102, 18-5103)	Ni-NTA	K Q	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	K Q
ProA (Cat. Nos. 18-5010, 18-5012, 18-5013)	Protein A	Q	Quantitation of IgG's of various species including human	0.1–700 µg/mL	0.025–2000 µg/mL	0.5–4000 µg/mL	Q
ProG (Cat. Nos. 18-5082, 18-5083, 18-5084)	Protein G	Q	Quantitation of IgG's of various species including human	0.1–700 µg/mL	0.025–2000 µg/mL	0.5–4000 µg/mL	Q
ProL (Cat. Nos. 18-5085, 18-5086, 18-5087)	Protein L	Q	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	Q
SA (Cat. Nos. 18-5019, 18-5020, 18-5021)	Streptavidin	K	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	K Q	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	K Q	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	K	Small molecule and fragment analyses only, should not be used for large molecule measurements	N/A	N/A	N/A	K
AAVX (Cat. Nos. 18-5160, 18-5161, 18-5162)	AAV Quantitation	Q	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	Q

K Kinetics | Q Quantitation | G Glycan Screening | I Impurity Testing | K Yes for Kinetics | Q Yes for Quantitation | Q 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 Range[1]			Regeneration
					Octet® QK[e], QK384[], RH96 ≥32 Channel	Octet® RED96e[], 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	(K)		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	(G)		Relative screening of Mannose glycans in crude or purified cell culture samples	Sample dependent	Sample dependent	N/A	(Q)
GlyS (Cat. No. 18-5135)	Sialic Acid Screening Kit	(G)		Relative screening of sialic acid in crude or purified cell culture samples	Sample dependent	Sample dependent	N/A	(Q)
HCP (Cat. Nos. 18-5141, 18-5158)	Anti-CHO HCP Detection Kit	(I)		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	(Q)
RPA (Cat. No. 18-5128)	Residual Protein A Detection Kit	(I)		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	(Q)
Regeneration Buffer Kit (Cat. No. 18-5171)	Regeneration Buffer Kit	(K)	(Q)	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		Octet® ProA Calibrator Set is intended for the calibration of the Octet® ProA Biosensors and generation of a standard curve for IgG titer measurement. The set includes 8 calibrators with IgG concentrations ranging from 1 – 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.				

(K) Kinetics (Q) Quantitation (G) Glycan Screening (I) Impurity Testing (K) Yes for Kinetics (Q) Yes for Quantitation (Q) No for Quantitation ◀ Protein and analyte dependent

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