



# Biosensor selection guide

Biosensor	Description	Intended use <sup>1</sup>	Application	Octet system quantitation dynamic range <sup>2</sup>				Regeneration
				Octet QK	Octet QK <sup>®</sup> /QK384/ HTX ≥32 channel	Octet RED96e/ RED96/ RED384/K2/ HTX 8 or 16 Channel	BLItz	
APS	Aminopropylsilane	K	Binding measurement of lipids, liposomes, hydrophobic proteins that don't have other methods of surface attachment	N/A	N/A	N/A	N/A	Protein and analyte dependent, users should validate their own assays
AR2G	Amine Reactive 2G	K	Covalently immobilizing any molecule with a terminal amine group for all kinetic analyses	N/A	N/A	N/A	N/A	Protein dependent
SSA	Super Streptavidin	K	Small molecule and fragment analyses only, should not be used for large molecule measurements	N/A	N/A	N/A	N/A	Analyte compounds can be washed off during dissociation in buffer since most have fast off-rates
AHC	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	N/A	Yes for K
AMC	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	N/A	Yes for K
SA	Streptavidin	K	Immobilizing biotinylated molecules for all kinetic analyses	N/A	N/A	N/A	N/A	Protein dependent
SAX	High Precision Streptavidin	Q and K	Immobilizing biotinylated molecules for high precision quantitation and kinetic measurements	Protein dependent	Protein dependent	Protein dependent	Protein dependent	Protein dependent
AHQ	Anti-Human IgG Fc	Q	Quantitation measurements of human IgG's or human Fc-fusion proteins	1–100 µg/mL	0.5–100 µg/mL	0.025–200 µg/mL	0.25–1000 µg/mL	No for Q

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AMQ	Anti-Murine IgG Fv	Q	Quantitation measurements of mouse IgG's or mouse F(ab') <sub>2</sub>	1–100 µg/mL	0.5–100 µg/mL	0.1–200 µg/mL	0.5–4000 µg/mL	No for Q
HIS1K	Anti-Penta-HIS	Q and K	Capture of His-tagged proteins for kinetic analysis with target analytes. Quantitation of His-tagged proteins in buffer, media or diluted lysate. Sensor is pre-coated with Penta-His antibody from Qiagen.	Not tested	Protein dependent, typically 0.25–200 µg/mL*	Protein dependent, typically 0.25–200 µg/mL*	Protein dependent, typically 10–200 µg/mL*	Yes for K
HIS2	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 and protocol (time and rpm) dependent, 0.1–200 µg/mL**	Protein dependent, typically 0.1–200 µg/mL**	Protein dependent
ProA	Protein A	Q	Quantitation of IgG's of various species including human	1–500 µg/mL	0.1–700 µg/mL	0.025–2000 µg/mL	0.5–4000 µg/mL	Yes
ProG	Protein G	Q	Quantitation of IgG's of various species including human	1–500 µg/mL	0.1–700 µg/mL	0.025–2000 µg/mL	0.5–4000 µg/mL	Yes
ProL	Protein L	Q	Quantitation of IgG's of various species via the kappa light chain	1–500 µg/mL	0.1–700 µg/mL	0.05–2000 µg/mL	0.5–2000 µg/mL	Yes
FAB2G	Anti-Human Fab-CH1 2nd Generation	Q and K	Kinetic analysis of human Fab fragments and IgG with target antigen, Fc receptors, or other analytes. Quantitation of Fab and IgG.	Not tested	Analyte dependent, typically 0.5–1000 µg/mL	Analyte dependent, typically 0.5–1000 µg/mL	Analyte dependent, typically 0.5–1000 µg/mL	Yes for Q and K
GST	Anti-GST	Q and K	Quantitation of GST-tagged proteins, direct capturing of GST-tagged proteins for kinetic analyses with analytes	Not tested	Protein dependent, typically 0.1–2000 µg/mL	Protein dependent, typically 0.1–2000 µg/mL	Protein dependent, typically 0.5–1000 µg/mL**	Yes for K, no for Q
NTA	Ni-NTA	Q and K	Quantitation of HIS-tagged proteins in buffer or diluted matrix, capturing of HIS-tagged proteins for kinetic analyses with various analytes	Not tested	Protein dependent, typically 0.5–1000 µg/mL	Protein dependent, typically 0.5–1000 µg/mL	Protein dependent, typically 0.5–1000 µg/mL	Yes for K, no for Q
HCP	Anti-CHO HCP Detection Kit	Q	High sensitivity assay kit for generic analyses of CHO HCP	N/A	Sample dependent, typically 0.5–200 ng/mL	Sample dependent, typically 0.5–200 ng/mL	Sample dependent, typically 0.5–200 ng/mL	No for Q

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RPA	Residual Protein A Detection Kit	Q	High sensitivity assay kit for analyses of residual Protein A	N/A	Sample dependent, typically 0.1–25 ng/mL	Sample dependent, typically 0.1–25 ng/mL	Sample dependent, typically 0.1–25 ng/mL	No for Q
IMM	Immunogenicity Assay Kit	Q	High sensitivity assay kit for the detection of anti-drug antibodies (ADAs)	N/A	Sample dependent	Sample dependent	Sample dependent	No for Q

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

<sup>2</sup>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

\*Assay conditions and dynamic range should be validated

\*\*Users should validate their assay



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