

Real-Time PCR and Digital PCR Instrument Filter Channels and Compatible Dyes

Instrument	Channel 1 EX: 470±15 nm EM: 520±15 nm	Channel 2 EX: 520±10 nm EM: 558±12 nm	Channel 3 EX: 550±10 nm EM: 586±10 nm	Channel 4 EX: 580±10 nm EM: 623±14 nm	Channel 5 EX: 640±10 nm EM: 682±14 nm	Channel 6 EX: 662±10 nm EM: 711±12 nm
7300	FAM™*, SYBR*, SYTO9	VIC™*, TET™, JOE™*, HEX™, Yakima Yellow	NED™*, ABY™, TAMRA™*, Cy3, PET™	ROX™*, Alexa Fluor™ 594		
7500/7500 Fast	FAM*, SYBR*, SYTO9	VIC*, TET, JOE*, HEX, Yakima Yellow	NED*, ABY, TAMRA*, Cy3*, PET	JUN™, ROX*, Texas Red™*, Alexa Fluor 594	Mustang Purple™, Cy5*, Alexa Fluor 647, LIZ™	
7900 HT	FAM*, SYBR*, SYTO9	VIC*, TET*, JOE*, HEX, Yakima Yellow	NED*, ABY, TAMRA*, Cy3, PET	ROX*		
StepOne™	FAM*, SYBR*, SYTO9	VIC*, TET, JOE*, HEX, Yakima Yellow		ROX*		
StepOne Plus	FAM*, SYBR*, SYTO9	VIC*, TET, JOE*, HEX, Yakima Yellow	NED*, TAMRA*, Cy3, PET	ROX*		
QuantStudio™ 1	FAM*, SYBR*, SYTO9	VIC*, TET, JOE, HEX, Yakima Yellow		JUN*, ROX*, Texas Red, Alexa Fluor 594		
QuantStudio 3	FAM*, SYBR*, SYTO9	VIC*, TET, JOE, HEX, Yakima Yellow	NED*, ABY*, TAMRA*, Cy3, PET	JUN*, ROX*, Texas Red, Alexa Fluor 594		
QuantStudio 5 (96-well)†	FAM*, SYBR*, SYTO9	VIC*, TET, JOE, HEX, Yakima Yellow	NED*, ABY*, TAMRA*, Cy3, PET	JUN*, ROX*, Texas Red, Alexa Fluor 594	Mustang Purple*, Cy5*, Alexa Fluor 647, LIZ	Cy5.5, Alexa Fluor 680
QuantStudio 5 (384-well)	FAM*, SYBR*, SYTO9	VIC*, TET, JOE, HEX, Yakima Yellow	NED*, ABY*, TAMRA*, Cy3, PET	JUN*, ROX*, Texas Red, Alexa Fluor 594	Mustang Purple*, Cy5*, Alexa Fluor 647, LIZ	
ViiA™ 7†	FAM*, SYBR*, SYTO9	VIC*, TET, JOE, HEX, Yakima Yellow	NED*, ABY*, TAMRA*, Cy3, PET	JUN*, ROX*, Texas Red, Alexa Fluor 594	Mustang Purple*, Cy5*, Alexa Fluor 647, LIZ	Cy5.5, Alexa Fluor 680
QuantStudio 6 Flex	FAM*, SYBR*, SYTO9	VIC*, TET, JOE, HEX, Yakima Yellow	NED*, ABY*, TAMRA*, Cy3, PET	JUN*, ROX*, Texas Red, Alexa Fluor 594	Mustang Purple*, Cy5*, Alexa Fluor 647, LIZ	
QuantStudio 7 Flex†	FAM*, SYBR*, SYTO9	VIC*, TET, JOE, HEX, Yakima Yellow	NED*, ABY*, TAMRA*, Cy3, PET	JUN*, ROX*, Texas Red, Alexa Fluor 594	Mustang Purple*, Cy5*, Alexa Fluor 647, LIZ	Cy5.5, Alexa Fluor 680
QuantStudio 6 Pro	FAM*, SYBR*, SYTO9	VIC*, TET, JOE, HEX, Yakima Yellow	NED*, ABY*, TAMRA*, Cy3, PET	JUN*, ROX*, Texas Red, Alexa Fluor 594	Mustang Purple*, Cy5*, Alexa Fluor 647, LIZ	
QuantStudio 7 Pro†	FAM*, SYBR*, SYTO9	VIC*, TET, JOE, HEX, Yakima Yellow	NED*, ABY*, TAMRA*, Cy3, PET	JUN*, ROX*, Texas Red, Alexa Fluor 594	Mustang Purple*, Cy5*, Alexa Fluor 647, LIZ	Cy5.5, Alexa Fluor 680
QuantStudio 12K Flex† (96-well, 384-well, TAC)	FAM*, SYBR*, SYTO9	VIC*, TET, JOE, HEX, Yakima Yellow	NED*, ABY*, TAMRA*, Cy3, PET	JUN*, ROX*, Texas Red, Alexa Fluor 594	Mustang Purple*, Cy5*, Alexa Fluor 647, LIZ	Cy5.5, Alexa Fluor 680
QuantStudio 12K Flex (OpenArray™)	FAM*	VIC*		ROX* (for QC only)		
QuantStudio Absolute Q™	FAM*	VIC* (recommended), HEX	ABY*	ROX* (for QC only)	Cy5* (recommended), JUN*	

Color: Calibration plate available from Thermo Fisher Scientific

†: Instrument with decoupled filters

*: Instrument arrives pre-calibrated or is calibrated upon installation for these dyes

For a list of compatible calibration materials, please visit [Real-Time PCR Instrument Calibration and Verification Kits | Thermo Fisher Scientific – US](#)

To calibrate your instrument for dyes without calibration plates available for purchase, please contact specialty_oligos@thermofisher.com and reference the user guide of your instrument to perform a custom dye calibration

Availability of certain dye calibration plates may vary by block type

Please direct technical questions to technical support at techsupport@thermofisher.com

For Research Use Only. Not for use in diagnostic procedures.

© 2024 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.

Cy3, Cy5 and Cy5.5 are registered trademarks of GE Healthcare UK Limited.