

# Dye Compatibility for Multiplexing with Mx3000P and Mx3005P QPCR Systems

**Cross talk:** refers to two dyes that have overlapping excitation and emission spectra. If dye pairs of this sort are multiplexed, you will see some level of signal from both dyes coming through on each of these two filter sets. This can artificially lower your Ct values and should be avoided.

Filter Set	Probe Dye	FAM	TET	HEX	JOE	VIC	Cy3	TAMRA	ROX	Texas Red	Cy5
Alexa350	Alexa350	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
FAM/SYBR® Green	SYBR® Green										
FAM/SYBR® Green	FAM		Ct+, B	OK	OK	OK	OK	OK	OK	OK	OK
TET	TET	Ct+		Ct+, B	UNK	UNK	UNK	Ct (2%)	OK	OK	OK
HEX/JOE/VIC	HEX	OK	Ct+				UNK	Ct+, B	OK	OK	OK
HEX/JOE/VIC	JOE	OK	Ct+				UNK	Ct+, B	OK	OK	OK
HEX/JOE/VIC	VIC	OK	Ct+				UNK	Ct+, B	OK	OK	OK
Cy3	Cy3	OK	Ctx	Ctx	Ctx	Ctx		UNK	UNK	UNK	OK
TAMRA	TAMRA	OK	OK	CT+	UNK	UNK	UNK		Ct+, B	Ct+, B	OK
ROX/Texas Red	ROX	OK	OK	OK	OK	OK	OK	Ct (2%)			OK
ROX/Texas Red	Texas Red	OK	OK	OK	OK	OK	OK	Ct (2%)			OK
Cy5	Cy5	OK	OK	OK	OK	OK	OK	OK	OK	OK	
OK=OK Mx pair (CT<1%)		Ct=<5% cross talk		Ct+=>5% cross talk		B=some background		Ctx=>50% cross talk		UNK=unknown	