

Kreatech™ FISH probes Product Information Sheet

KBI-40201-40241 Sub-Telomere Probes









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DANGER

PI-KBI-40201-40241_D2.0

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Kreatech™ Sub-Telomere FISH probes

Introduction:

Submicroscopic rearrangements at the end of the chromosomes have been shown to be responsible for a small but significant percentage of otherwise unexplained mental retardations. Approximately 5% individuals with mental retardation of unknown etiology have an abnormality of the ends of the chromosomes, called sub-telomeres that can be detected by FISH sub-telomere analysis. A family history of mental retardation, growth retardation, dysmorphic features and congenial anomalies increase the likelihood of detecting a subtelomeric abnormality.

Intended use:

Sub-Telomere FISH probes cover unique sequences at the subtelomeric end of the short or long arm of a specific human chromosome. This enables identification of deletions or rearrangements at the telomeric end of chromosomes.

The probes are recommended to be used in combination with one of the Kreatech Pretreatment kits providing necessary reagents to perform FISH on various sample types for optimal results. (see also www.LeicaBiosystems.com and look for Kits & reagents

Reagent:

Kreatech Sub-Telomere FISH probes are direct-labeled DNA probes provided in a concentrated format in a choice of the following fluorophores:

Platinum*Bright*™495 Green
Platinum*Bright*™550 Red
Platinum*Bright*™415 Blue

For FISH the probes need to be diluted with the supplied hybridization buffer (FHB). For hybridization use 2 parts of probe + 8 parts of FHB. To mix several Sub-telomere probes replace 2 parts of FHB with 2 parts of another probe.

Note:

For tissue hybridization use PTB (Paraffin Tissue Hybdridization Buffer) – available on request.

Interpretation:

Sub-Telomeric Probes are designed to detect deletions, amplifications or rearrangements at the telomeric end of chromosomes. Deletions will be observed as lack of and amplifications as gain of the probe specific signal. Rearrangements can be detected on metaphase chromosomes by taking into account chromosome banding patterns or use of control probes targeting the same normal chromosome or the corresponding derivative chromosome.

Kreatech FISH probes are REPEAT-FREE™ and therefore do not contain Cot-1 DNA. Hybridization efficiency is increased and background, due to unspecific binding, is highly reduced.

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Warning and precautions: In case of emergencies check SDS sheets for medical advice. SDS sheets may be obtained by either contacting Leica Technical Support or visiting www.LeicaBiosystems.com. DNA probes contain formamide which is a teratogen; do not inhale or allow skin contact. Wear gloves and a lab coat when handling DNA probes. All materials should be disposed of according to your institution's guidelines for hospital waste disposal.

Reagent Storage and Handling:

Store at 2-8 °C. Reagents should not be used after the expiration date on the vial label.

TECHNICAL SUPPORT Technical support is available at www.LeicaBiosystems.com or +31 20 6919181

or via e-mail: kreatech-support@leicabiosystems.com.

CUSTOMER SERVICE

Kreatech probes may be ordered through Leica Customer Service +31 20 6919181 or order

via e-mail: purchase.orders@leica-microsystems.com.

Product code	Location	Proximal Marker	Distal Marker	Size	Color	Conc	Nr of test
KBI-40201R/G/B	Sub Telomere 1pter	RH103110	RH65042	165 kb	red, green or blue	5x	5
KBI-40202R/G/B	Sub Telomere 1qter	RH92359	STSG27797	175 kb	red, green or blue	5x	5
KBI-40203R/G/B	Sub Telomere 2pter	SHGC-85549	D2S2147	220 kb	red, green or blue	5x	5
KBI-40204R/G/B	Sub Telomere 2qter	RH25204	SHGC-1271	190 kb	red, green or blue	5x	5
KBI-40205R/G/B	Sub Telomere 3pter	PMC310823P5	SHGC-86046	180 kb	red, green or blue	5x	5
KBI-40206R/G/B	Sub Telomere 3qter	AFM024XF6	RH93551	170 kb	red, green or blue	5x	5
KBI-40207R/G/B	Sub Telomere 4pter	D4S1655	RH76456	180 kb	red, green or blue	5x	5
KBI-40208R/G/B	Sub Telomere 4qter	D4S592	UT2219	195 kb	red, green or blue	5x	5
KBI-40209R/G/B	Sub Telomere 5pter	RH59774	ATA20G07	175 kb	red, green or blue	5x	5
KBI-40210R/G/B	Sub Telomere 5qter	RH76175	SHGC-111734	270 kb	red, green or blue	5x	5
KBI-40211R/G/B	Sub Telomere 6pter	RH68454	RH40931	170 kb	red, green or blue	5x	5
KBI-40212R/G/B	Sub Telomere 6qter	WI-5704	RH60539	165 kb	red, green or blue	5x	5
KBI-40213R/G/B	Sub Telomere 7pter	SHGC-109972	RH48875	220 kb	red, green or blue	5x	5
KBI-40214R/G/B	Sub Telomere 7qter	RH48601	SWSS2567	185 kb	red, green or blue	5x	5
KBI-40215R/G/B	Sub Telomere 8pter	SHGC-155342	SHGC-146685	175 kb	red, green or blue	5x	5
KBI-40216R/G/B	Sub Telomere 8qter	RH65184	8QTEL25	220 kb	red, green or blue	5x	5
KBI-40217R/G/B	Sub Telomere 9pter	RH80320	RH65569	195 kb	red, green or blue	5x	5
KBI-40218R/G/B	Sub Telomere 9qter	AFMB303ZG9	SHGC-149365	185 kb	red, green or blue	5x	5
KBI-40219R/G/B	Sub Telomere 10pter	SHGC-146958	RH80240	180 kb	red, green or blue	5x	5
KBI-40220R/G/B	Sub Telomere 10qter	BV448729	RH10045	235 kb	red, green or blue	5x	5
KBI-40221R/G/B	Sub Telomere 11pter	GDB:197852	SHGC-81865	155 kb	red, green or blue	5x	5
KBI-40222R/G/B	Sub Telomere 11qter	RH27772	D11S4437	170 kb	red, green or blue	5x	5
KBI-40223R/G/B	Sub Telomere 12pter	RH93085	SHGC-147908	185 kb	red, green or blue	5x	5
KBI-40224R/G/B	Sub Telomere 12qter	RH52548	SHGC-78788	185 kb	red, green or blue	5x	5
KBI-40225R/G/B	Sub Telomere 13qter	SHGC-145617	SHGC-153561	200 kb	red, green or blue	5x	5
KBI-40226R/G/B	Sub Telomere 14qter	SHGC-101763	SHGC-85227	170 kb	red, green or blue	5x	5
KBI-40227R/G/B	Sub Telomere 15qter	SHGC-100741	RH54179	145 kb	red, green or blue	5x	5
KBI-40228R/G/B	Sub Telomere 16pter	16PTEL06	STSG608831	145 kb	red, green or blue	5x	5
KBI-40229R/G/B	Sub Telomere 16qter	RH67860	RH48427	185 kb	red, green or blue	5x	5
KBI-40230R/G/B	Sub Telomere 17pter	UT18	RH74696	120 kb	red, green or blue	5x	5
KBI-40231R/G/B	Sub Telomere 17qter	G62613	SHGC-147547	65 kb	red, green or blue	5x	5
KBI-40232R/G/B	Sub Telomere 18pter	WI-9527	WI-5822	185 kb	red, green or blue	5x	5
KBI-40233R/G/B	Sub Telomere 18qter	RH94366	RH28485	210 kb	red, green or blue	5x	5
KBI-40234R/G/B	Sub Telomere 19pter	RH11517	RH55732	225 kb	red, green or blue	5x	5
KBI-40235R/G/B	Sub Telomere 19qter	RH79767	RH39184	130 kb	red, green or blue	5x	5
KBI-40236R/G/B	Sub Telomere 20pter	RH48717	D20S210	240 kb	red, green or blue	5x	5
KBI-40237R/G/B	Sub Telomere 20qter	STSG25548	BV448725	170 kb	red, green or blue	5x	5
KBI-40238R/G/B	Sub Telomere 21qter	D21S1271	SHGC-170324	195 kb	red, green or blue	5x	5
KBI-40239R/G/B	Sub Telomere 22qter	STDJ355C18T7	STDJ402G11A	290 kb	red, green or blue	5x	5
KBI-40240R/G/B	Sub Telomere XYpter	DXYS130	AFMA054YD1	180 kb	red, green or blue	5x	5
KBI-40241R/G/B	Sub Telomere XYqter	DXS1107	DXYS224	160 kb	red, green or blue	5x	5