

	Fluoreszenz-in-situ-Hybridisierung an Metaphasen und Interphasezellkernen (native Zellen, fixierte Zellen)					
	Chromosomenregion/en (Gen / Marker)	Sondenbezeichnung	Firma (M=MetaSystems, C=CytoCell, CT=CytoTest, K=Kreatech, V=Vysis, EG=Empire Genomics, E=Eigene Sonden)	Datum der Freigabe	Freigabe durch	
Nicht-hämatologische Sonden	4p16.3 (NSD2/NELFA) / 4q12 (RH105779/SHGC-153642)	XL WHSCR (Wolf-Hirschhorn)	M	11/17/2010	AJ	
	5p15.2-15.3 (D5S1518E/5P0006/D5S1976) / 5q31.2 (EGR1)	XL Cri-du-Chat	M	11/17/2010	AJ	
	7p11.2 (EGFR) / 7q11.23(ELN/LIMK1)	XL Williams-Beuren	M	9/25/2025	MG	
	11p13	WT1 (WAGR – Syndrom)	E	2/13/2017	AJ	
	11p13	p60 (WAGR – Syndrom)	E	2/13/2017	AJ	
	11p13	G1 (WAGR – Syndrom)	E	2/13/2017	AJ	
	11p13	G3 (WAGR – Syndrom)	E	2/13/2017	AJ	
	13q14.2 (RB1) / 18q21.3 (MALT1) / 21q22.1-q22.2 (DSCR4)	XA 13/18/21	M	9/2/2014	AJ	
	15q11.2 (SNRPN/PWAR5) / 15q24 (PML)	XL Prader-Willi/Angelman	M	12/9/2010	AJ	
	16p13.3	RT100 (Rubinstein-Taybi Syndrom)	E	2/24/2015	AJ	
	16p13.3	RT203 (Rubinstein-Taybi Syndrom)	E	2/24/2015	AJ	
	16p13.3	313F2 (Tuberöse Hirnsklerose)	E	8/26/2014	AJ	
	16p13.3	CW23 (Tuberöse Hirnsklerose)	E	8/27/2014	AJ	
	17p13 (PAFAH1B1) / 17p11.2 (RAI1)	XL Smith-Magenis/Miller-Dieker	M	4/27/2022	AJ	
	22q11.21 (TBX1) / 22q13.33 (ARSA)	TBX1 / ARSA FISH Probe (Di George)	CT	6/11/2021	AJ	
	Xp21 (CAW7 Exon 1 Dystrophin)	CAW7 (Exon 1 Dystrophin-Gen)	E	6/5/1993	AJ	
	Xp21 (K2 Exon 3 Dystrophin)	K2 (Exon 3 Dystrophin-Gen)	E	6/5/1993	AJ	
	Xp21 (CAW40 Exon 5-7 Dystrophin)	CAW40 (Exon 5-7 Dystrophin-Gen)	E	6/5/1993	AJ	
	Xp21 (YAC 5'-3 Exon 8-17 Dystrophin)	YAC 5'-3 (Exon 8-17 Dystrophin-Gen)	E	6/5/1993	AJ	
	Xp21 (cDY4.117 Exon 44 Dystrophin)	cDY4.117 (Exon 44 Dystrophin-Gen)	E	6/5/1993	AJ	
	Xp21 (Cpt1 Exon 45 Dystrophin)	Cpt1 (Exon 45 Dystrophin-Gen)	E	6/5/1993	AJ	
	Xp21 (46-46 Exon exon 46/47 Dystrophin)	46-46 (Exon exon 46/47 Dystrophin-Gen)	E	6/5/1993	AJ	
	Xp21 (2B3 Exon 48 Dystrophin)	2B3 (Exon 48 Dystrophin-Gen)	E	6/5/1993	AJ	
	Xp21 (cLA2F5 Exon 49 Dystrophin)	(cLA2F5 (Exon 49 Dystrophin-Gen)	E	6/5/1993	AJ	
	Xp21 (TM14 Exon 50 Dystrophin)	TM14 (Exon 50 Dystrophin-Gen)	E	6/5/1993	AJ	
	Xp21 (TM13 Exon 51 Dystrophin)	TM13 (Exon 51 Dystrophin-Gen)	E	6/5/1993	AJ	
	Xp21 (TM7 Exon 52 Dystrophin)	TM7 (Exon 52 Dystrophin-Gen)	E	6/5/1993	AJ	
Xp22.31 (KAL1) / Xp22.31 (STS) / Xp11.1-q11.1 (DXZ1)	Kallmann (KAL1) / STS Probe Combination	C	6/19/2013	AJ		
Xp11.1-q11.1 (Xcen) / Yp11.1-q11.1 (Ycen) / 18p11.1-q11.1 (18cen)	XA X / Y / 18 (Aneusomy Probe)	M	9/24/2010	AJ		
Yp11.31 (SRY) / Yq12 / Xcen (DXZ1)	SRY Probe	C	9/1/2016	AJ		
Hämatologische Sonden zur Detektion von numerischen Veränderungen	1p12(FAM46C) / 14q24.3(MLH3) / 16q23(MAF)	CL FAM46C/MLH3/MAF	M	8/14/2017	AJ	
	1p32.3 (CDKN2C) / 1q21-22 (CKS1B) / 13q14.2 (DLEU1)	OD 1p32/1q21/13q14	M	6/25/2025	MG	
	1q21-22 (CKS1B) / 13q14.2 (DLEU1)	CL 1q21 / 13q14	M	6/3/2016	AJ	
	4q12 (SCFD2) / 4q24 (TET2)	XL TET2	M	2/5/2015	AJ	
	5q31.2 (EGR1) / 5q32-33.1 (RPS14)	XL 5q31 / 5q33	M	10/14/2014	AJ	
	5p15.3 (TERT) / 5q35.2-35.3 (NSD1)	CL NSD1 / hTERT	M	10/20/2020	AJ	
	6q21 (SEC63) / 8q24.21 (MYC)	CL 6q21 / 8q24	M	6/2/2015	AJ	
	7p11.1-q11.1 (7cen) / 7q22 (KMT2E) / 7q36 (EZH2)	XL 7q22/ 7q36	M	5/23/2013	AJ	
	8p21.1 (PNOC) / 19q13.3 (RH74993/RH39122)	CL 8p21/19q13	M	11/29/2012	AJ	
	8p11.1-q11.1 (8cen) / 20q12 (PTPRT)	CL 20q12/8cen	M	11/11/2020	AJ	
	9p21 (CDKN2A/CDKN2B) / 9q22.3 (CENPP)	XL CDKN2A/9q22	M	10/25/2016	AJ	
	9q34.1 (ABL1) / 15q22.3 (SMAD6)	CL ABL1/ SMA	M	6/3/2011	AJ	
	11q22.3 (ATM) / 12q13.3 (GLI)	CL 11q22/12q13	M	6/17/2015	AJ	
	11q22.3 (ATM) / 17p13 (TP53)	XL ATM/ TP53	M	9/20/2011	AJ	
	13q14.2 (DLEU1) / 17p13 (TP53)	XL DLEU/ TP53	M	2/14/2012	AJ	
	17p13.1 (POLR2A)	POLR2A	EG	9/28/2020	AJ	
	17cen	17 Zentromer	EG	9/28/2020	AJ	
	Rearrangements und Translokationen	3q26.2 (proximal / distal MECOM)	XL MECOM 3q26	M	1/25/2010	AJ
		3q27-28 (proximal / distal BCL6)	XL BCL6 BA	M	11/28/2014	AJ
4q12 (proximal FIP1L1) / 4q12 (CHIC2) / 4q12 (PDGFRA)		XL 4q12	M	4/22/2016	AJ	
4q21.3-22 (AFF1) / 11q23.3 (KMT2A)		XL t(4;11) AFF1/KMT2A DF	M	12/16/2020	AJ	
4p16.3 (FGFR3) / 14q32.3 (IGH)		XL t(4;14) FGFR3/IGH DF	M	10/2/2017	AJ	
5q32-33.1 (proximal / distal PDGFRB)		XL PDGFRB Break Apart	M	8/20/2015	AJ	
6p21.1 (CCND3) / 14q32.3 (IGH)		XL t(6;14) CCND3/IGH DF	M	10/2/2017	AJ	
8p11.2 (distal / proximal FGFR1)		XL FGFR1	M	8/20/2015	AJ	

Hämatologische Sonden zur Detektion von Rea

8q21.3-22.1 (RUNX1T1) / 21q22.1 (RUNX1)	XL t(8;21) plus	M	1/31/2019	AJ
8p22 (PCM1) / 9p24 (JAK2)	XL t(8;9) PCM1/JAK2 DF	M	1/6/2642	AJ
8q24.21 (proximal MYC) / MYC / 8q24.21 (distal MYC)	XL MYC BA triple-color	M	11/10/2014	AJ
8q24.21 (MYC) / 14q32.3 (IGH)	XL t(8;14) MYC/IGH DF	M	12/21/2018	MG
9p24 (distal / proximal JAK2)	XL JAK2 BA	M	8/29/2023	AJ
9p21 (MLLT3) / 11q23.3 (KMT2A)	XL t(9;11) MLLT3/KMT2A DF	M	1/19/2021	AJ
9q34.1 (ABL1) / 22q11.2 (BCR)	XL BCR / ABL1 plus	M	10/23/2014	AJ
11q13.3 (MYEOV) / 11q13.3 [CCND1 (BCL1)]	XL CCND1	M	4/22/2015	AJ
11q13.3 (TPCN2/prox. MYEOV,CCND1) / 14q32.3 IGH)	XL t(11;14) MYEOV/IGH	M	10/20/2017	AJ
11q23.3 (proximal / distal KMT2A)	XL MLL plus	M	5/18/2015	AJ
12p13.2 (distal / proximal ETV6)	XL ETV6	M	10/23/2014	AJ
14q32.3 (proximal / distal IGH)	XL IGH BA	M	9/19/2017	AJ
14q32.3 (IGH) / 16q23 (WVVOX,MAF)	XL t(14;16) IGH/MAF DF	M	10/20/2017	AJ
14q32.1-32.2 (proximal / distal TCL1)	XL TCL1 BA	M	9/22/2021	MG
14q32.3 (IGH) / 18q21.3 (BCL2)	XL t(14;18) IGH/BCL2 DF	M	11/9/2018	MG
14q32.3 (IGH) / 20q12 (MAFB)	XL t(14;20) IGH/MAFB DF	M	2/26/2021	AJ
15q24 (PML) / 17q21.1-21.2 (RARA)	XL t(15;17) DF	M	5/6/2014	AJ
16q21-22 (proximal / distal CBFβ)	XL CBFβ	M	11/18/2014	AJ
17q21.1-q21.2 (proximal / distal RARA)	XL RARA BA	M	10/23/2024	AJ
18q21.3 (proximal / distal BCL2)	XL BCL2 BA	M	1/27/2021	AJ
19q13.3 (proximal / distal BCL3)	XL BCL3 BA	M	2/10/2021	AJ
21q22.1 (proximal / distal RUNX1)	XL RUNX1	M	8/27/2014	AJ
wcp1	--	E	6/27/2013	AJ
1pter	CTB-14E10	E	9/19/2013	AJ
pcp1p	--	E	6/3/2013	AJ
1q12	PUC1.77	E	2/29/2000	AJ
pcp1q	--	E	6/3/2013	AJ
1qter	CTB-160H23	E	9/17/2015	AJ
wcp2	--	E	9/5/2013	AJ
2pter	PAC 892G20	E	9/2/2013	AJ
pcp2p	--	E	9/2/2013	AJ
2cen	PBS4D	E	7/4/2002	AJ
pcp2q	--	E	8/22/2013	AJ
2qter	RP11-463B12	E	10/27/2016	AJ
wcp3	--	E	7/22/2013	AJ
3pter	PAC1186B18	E	8/14/2014	AJ
pcp3p	--	E	7/18/2013	AJ
3cen	pAE0.68	E	10/28/2009	AJ
pcp3q	--	E	7/24/2014	AJ
3qter	CTC-196F4	E	2/6/2018	MG
wcp4	--	E	6/27/2013	AJ
4pter	CTC-36P21	E	12/10/2021	MG
pcp4p	--	E	2/26/2015	AJ
4cen	pYAM 11-39	E	7/21/2023	AJ
pcp4q	--	E	9/6/2013	AJ
4qter	CTC-963K6	E	9/6/2013	AJ
wcp5	--	E	9/5/2013	AJ
5pter	BAC114j18	E	2/22/2016	AJ
pcp5p	--	E	9/3/2015	AJ
cen1,5,19	PZ5-1	E	7/31/1992	AJ
pcp5q	--	E	3/3/2014	AJ
5qter	CTC-240G13	E	1/5/2016	AJ
wcp6	--	E	10/7/2013	AJ
6pter	CTB-62111	E	12/10/2021	MG
pcp6p	--	E	6/17/2013	AJ
6cen	pEDZ6	E	7/4/2002	AJ
pcp6q	--	E	9/2/2013	AJ
6qter	CTB-57H24	E	9/2/2013	AJ
wcp7	--	E	4/15/2013	AJ
7pter	CTB-164D18	E	6/12/2018	MG
pcp7p	--	E	2/13/2014	AJ
7cen	p711	E	11/16/1990	AJ
pcp7q	--	E	9/2/2013	AJ
7qter	CTB-3K23	E	9/2/2013	AJ
wcp8	--	E	1/23/2013	AJ

Nicht kommerzielle Sondensätze

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8pter	BAC 77L23	E	9/2/2013	AJ
pcp8p	--	E	9/2/2013	AJ
8cen	pZ8.4	E	12/20/2013	AJ
pcp8q	--	E	2/7/2013	AJ
8qter	CTC-489D14	E	10/29/2018	MG
wcp9	--	E	6/16/2014	AJ
9pter	PAC 34H2	E	6/16/2014	AJ
pcp9p	--	E	12/1/2014	AJ
9cen	pMR9A	E	7/26/2016	AJ
pcp9q	--	E	5/17/2013	AJ
9qter	GS1-135117	E	2/6/2017	AJ
10pter	PAC 305F4	E	9/21/1999	AJ
wcp10	--	E	9/5/2013	AJ
pcp10p	--	E	7/9/2014	AJ
10cen	p10.1	E	2/22/2019	AJ
pcp10q	--	E	7/9/2014	AJ
10qter	PAC 137E24	E	10/13/1999	AJ
wcp11	--	E	6/11/2013	AJ
11pter	CTC-908H22	E	5/4/2015	AJ
pcp11p	--	E	7/26/2016	AJ
11cen	pRB11	E	7/4/2002	AJ
pcp11q	--	E	5/4/2015	AJ
11qter	PAC1064E20	E	5/4/2015	AJ
wcp12	--	E	3/8/2013	AJ
12pter	CTC-496A11	E	12/5/2014	BM
pcp12p	--	E	12/6/2016	AJ
12cen	D12Z1	E	5/3/1991	AJ
pcp12q	--	E	12/20/2013	AJ
12qter	PAC 221K18	E	5/4/2015	AJ
pcp13q	--	E	8/27/2013	AJ
cen13/21	pZ21A	E	6/17/2014	AJ
13qter	CTB-163C9	E	8/27/2013	AJ
pcp14q	--	E	2/13/2014	AJ
cen14/22	p14.1	E	9/13/2017	AJ
14qter	CTC-820M16	E	12/3/2014	AJ
pcp15q	--	E	11/18/2013	AJ
15cen	D15Z1	E	11/18/2013	AJ
15qter	PAC 124O5	E	9/21/1999	AJ
wcp16	--	E	2/6/2013	AJ
16pter	PAC 121J4	E	5/8/2014	AJ
pcp16p	--	E	11/18/2013	AJ
16cen	pHuR 195	E	6/6/2025	AJ
pcp16q	--	E	8/14/2014	AJ
16qter	CTC-240G10	E	8/14/2014	AJ
wcp17	--	E	4/28/2014	AJ
17pter	BAC 68F18	E	6/4/2014	AJ
pcp17p	--	E	4/25/2014	AJ
17cen	17cen oder p17H8	E	10/7/2020	AJ
pcp17q	--	E	9/30/2013	AJ
17qter	PAC 362K4	E	9/17/2015	AJ
wcp18	--	E	4/9/2014	AJ
18pter	P1 52M11	E	11/17/2015	AJ
pcp18p	--	E	4/9/2014	AJ
18cen	L1.84	E	9/15/1993	AJ
pcp18q	--	E	5/8/2014	AJ
18qter	CTC-964M9	E	10/5/2016	AJ
wcp19	--	E	4/27/2016	AJ
19pter	CTC-546C11	E	10/9/2017	AJ
pcp19p	--	E	8/29/2012	AJ
19cen	PZ5-1 (cen1,5,19) oder pG-A16 (cen5,19)	E	7/31/1992	AJ
pcp19q	--	E	7/2/2010	AJ
19qter	GS1-1129C9	E	8/29/2012	AJ
wcp20	--	E	9/5/2013	AJ
20pter	CTB-10611	E	8/22/2013	AJ
pcp20p	--	E	8/22/2013	AJ

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20cen	pZ20	E	6/27/2002	AJ
pcp20q	--	E	8/22/2013	AJ
20qter	CTB-81F12	E	9/19/2013	AJ
cen13/21	pZ21A	E	6/17/2014	AJ
pcp21q	--	E	9/30/2013	AJ
21qter	CTB-63H24	E	12/3/2014	AJ
cen14/22	p14.1	E	9/13/2017	AJ
22cen	pI90-22	E	4/27/2015	AJ
pcp22q	--	E	9/10/2013	AJ
22qter	CTB-99K24 (SHANK)	E	8/5/2014	AJ
wcpX	--	E	2/8/2013	AJ
XYpter	PAC 98C4	E	5/5/2015	AJ
Xp	cosF20 (SHOX)	E	8/27/2013	AJ
pcpXp	--	E	8/27/2013	AJ
Xcen	pXBR	E	11/30/2018	MG
pcpXq	--	E	9/23/2013	AJ
XYqter	BAC 225F06	E	9/23/2013	AJ
wcpY	--	E	11/12/2015	AJ
pcpYp	--	E	11/12/2015	AJ
Ycen	pLAY5.5	E	11/12/2015	AJ
pcpYq	--	E	9/15/2015	AJ
Y-Heterochromatin (Yq12)	pHY2.1	E	11/12/2015	AJ
XYpter	PAC 98C4	E	5/5/2015	AJ
XYqter	BAC 225F06	E	9/23/2013	AJ
repetitive DNA alle Zentromere	--	E	6/20/2014	AJ

Gelbe Markierung: Seit letztem Audit neu aufgenommen