

## Knochenmarker Normalwerte für Kinder

Knochenmarker	Kat. Nr.	Ge- schlecht	Einheit	Altersgruppen					Refe- renzen	
<b>BAP (Serum)</b> Knochenspezifische Phosphatase	8012	m	U/l ± SD		104 ± 21 0–2 J.	94 ± 17 3–9 J.	114 ± 21 10–14 J.		59 ± 19 15–18 J.	[1]/[2]
		w	U/l ± SD		122 ± 19 0–2 J.	106 ± 16 3–8 J.	112 ± 16 9–12 J.		39 ± 23 13–17 J.	
		Tanner Stage		Tanner I	Tanner II–III	Tanner IV–V				
		m	U/l ± SD	95 ± 22	114 ± 35	121 ± 37				[3]
		w	U/l ± SD	84 ± 23	113 ± 43	79 ± 46				
<b>CICP/PICP (Serum)</b> C-terminales Propeptid des Typ-I-Kollagens	8003	m/w	ng/ml			295–365 4,0–12,9 J.	444 ± 192 13 J.	449 ± 123 14 J.	347 ± 145 15–18 J.	[4]
		m	ng/ml		211–1.310 0–2 J.	147–830 3–9 J.	123–618 10–14 J.	127–189 15–19 J.	77–183 20–50 J.	[1]
		w	ng/ml		230–1.104 0–2 J.	155–568 3–8 J.	122–373 9–12 J.	74–167 13–17 J.	37–133 20–50 J.	
		m/w	ng/ml			113–426 4–13 J.		110–443 14–18 J.		[5]
<b>NTX (Serum)</b> N-terminale Telopeptide des Typ-I-Kollagens	504836	Tanner Stage		Tanner I	Tanner II–IV	Tanner V				
		m	BCE nmol/l	50,6 (37,2–88,9)	71,7 (32,7–126,0)	18,0 (11,3–50,4)				[6]
		w	BCE nmol/l	53,6 (31,2–90,9)	50,2 (12,9–79,8)	12,8 (9,6–22,2)				
<b>NTX (Urin)</b> N-terminale Telopeptide des Typ-I-Kollagens	504837			0–1 J.	2–5 J.	6–10 J.	11–15 J.	16–20 J.		
		m/w	BCE nmol/mmol Kreatinin	1639 (102–4769)	689 (34–1752)	497 (90–1356)	429 (34–2158)	192 (34–780)		
<b>Deoxypyridinolin (Urin)</b>	8007	Tanner Stage		Tanner I	Tanner II–III	Tanner IV–V				
		m	nmol/mmol Kreatinin	23,5 ± 1,9	25,6 ± 4,0	31,1 ± 9,5				[9]
		w	nmol/mmol Kreatinin	21,0 ± 2,1	33,0 ± 5,1	23,2 ± 7,0				
		m/w	nmol/mmol Kreatinin	22,5 ± 1,4	28,7 ± 3,2	28,0 ± 6,2				
<b>Helikales Peptid (Urin)</b> Helikales Peptid 620–633 aus der alpha-I-Kette des Typ-I-Kollagens	8022	m/w	ug/mmol Kreatinin			804– 11305 4–12,9 J.				[5]
<b>Pyridinolin (Urin)</b> freies Pyd & DPD	8010	m/w	nmol/mmol Kreatinin			45,7–85,1 4–12,9 J.				[10]
		m/w	nmol/mmol Kreatinin			55,5 ± 6,5 4–12,9 J.	40,8 ± 6,4 13–18 J.			[11]
<b>Pyridinolin (Serum)</b>	8019	m/w	nmol/l			2,49 ± 0,12 4–12,9 J.	1,6 ± 1,0 13–18 J.			[11]

Knochenmarker	Kat. Nr.	Geschlecht	Einheit	Altersgruppen						Referenzen
				Status	Prä-pubertär	Frühphase Adoleszenz	Spätphase Adoleszenz			
<b>TRAP5b (Serum)</b> Aktive Isoform 5b der tartratresistenten sauren Phosphatase	8036									
		w	U/l	8,1±3,8 1-9 J.	10,0±2,7 10-13 J.	2,3±0,7 14-17 J.				[12]
		m	U/l	6,6±3,6 1-10 J.	9,9±3,3 11-13 J.	3,4±1,4 14-17 J.				[12]

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