

# Types of Metaphase Chromosomes

Chromosome	Characteristics
Metacentric	Centromere lies roughly in the middle of the chromosome.
Submetacentric	The centromere is positioned in such a way that p bundle branch structure are significantly shorter than bundle branch q.
Acrocentric	The centromere is shifted to one end of the chromosome; The P arm is very short.
Telocentric	The centromere lies at the end of the chromosome; The chromosome has only Q bundle arms (not found in humans).
Holocentric	Formations performing the function of a centromere are scattered along the entire length of the chromosome (not found in humans, rarely occurs e.g. in <i>Caenorhabditis elegans</i> ).

For an accurate distinction between metacentric, submetacentric, and possibly acrocentric chromosomes, the value of centromeric index is crucial<sup>[1]</sup>.

## Links

### Related Articles

- Centromera
- Chromosome
- Chromosome identification
- Human Karyotype
- Metaphase chromosome structure

### Reference

1. KOČÁREK, Eduard – PÁNEK, Martin – NOVOTNÁ, Drahuše. *Klinická cytogenetika I.: úvod do klinické cytogenetiky, vyšetřovací metody v klinické cytogenetice*. 1.. edition. Karolinum, 2006. 120 pp. ISBN 80-246-1069-8.