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Nota di contenuto	Chromaffin cells and Granins: History and Perspectives -- The extended granin family: structure, function, and biomedical implications -- CgA and CgB in granule secretion -- Proteolytic processing of CgA and CgB/Antimicrobial properties of Chromogranins -- Chromogranins and inositol 1,4,5-trisphosphate-dependent Ca2+-signaling -- CgA in angiogenesis and tumor biology -- Full length CgA: a multifaceted protein in cardiovascular health and disease -- Physio-pharmacological aspects of three Chromogranin A-derived peptides: Vasostatin, Catestatin, and Serpinin -- Comparative aspects of CgA-derived peptides in cardiac homeostasis -- Molecular and cellular mechanisms of action of CgA-derived peptides in cardiomyocytes and endothelial cells -- CgA-derived peptides in pre- and post-conditioning cardioprotection -- Catestatin in physiopathology -- Serpinin: from biosynthesis to cell biology and physiopathology -- Pancreastatin and metabolism -- Chromogranins and the quantum release of catecholamines.

Sommario/riassunto

The volume is designed to provide an integrated overview of the results from the last fifteen years of research on Chromogranins in relation to cell biology, physiology and biomedicine. The different chapters highlight novel activities of these proteins, including their role in granule biogenesis, hormone co-storage, stimulus-processing-secretion coupling, autonomic sympathetic/parasympathetic balance, immune and cardiocirculatory function, and the response to stress. Biomedical aspects are also illustrated with focus on the prognostic and diagnostic significance of Chromogranin in the presence of tumors, cardiovascular diseases and inflammatory conditions. The volume is of interest for laboratory and clinical scientists, PhD and Post-doc students that will be inspired to go deep inside the molecular, biochemical, physiological, pharmacological and clinical aspects of these fascinating multifaceted proteins.