

1. Record Nr.	UNINA9910298279503321
Titolo	Semaphorins [[electronic resource]] : A Diversity of Emerging Physiological and Pathological Activities // edited by Atsushi Kumanogoh
Pubbl/distr/stampa	Tokyo : , : Springer Japan : , : Imprint : Springer, , 2015
ISBN	4-431-54385-6
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (225 p.)
Disciplina	571.6 573.8 610 611.01816 614.5999 616.13 616079
Soggetti	Immunology Neurobiology Cancer research Cell biology Angiology Molecular biology Cancer Research Cell Biology Molecular Medicine
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	1. Semaphorin Receptors and their Signaling -- 2. Semaphorin Regulation of Neural Circuit Assembly in the Central Nervous System -- 3. Axon Guidance in the Spinal Cord -- 4. Semaphorin and Neuronal Migration in the Central Nervous System -- 5. Structure of Semaphorins and their Receptors -- 6. Regulation of Angiogenesis and Tumor Progression by Semaphorins -- 7. Semaphorins in the Immune System

-- 8. Semaphorins in Bone Homeostasis -- 9. Semaphorin in the Heart
-- 10. Semaphorins and Neurodegenerative Disorders -- 11.
Semaphorin in the Retinal System.

Sommario/riassunto

This book presents the current concepts of semaphorin biology. In the early 1990s, semaphorins were originally identified as axon guidance cues that function during neuronal development. However, cumulative findings have clarified that they have diverse functions in many physiological processes, including cardiogenesis, angiogenesis, vasculogenesis, osteoclastogenesis, retinal homeostasis, and immune regulation. Additionally, they have been implicated in the pathogenesis of various human diseases, including tumorigenesis/tumor metastasis, neuroregenerative diseases, retinal degeneration, irregular pulse/sudden death, and immune disorders. Based on this current research background, the book covers the essential state-of-the-art findings for basic scientists in biochemistry, molecular biology, neuroscience, developmental biology, and structural biology, as well as for physicians in neurology, cardiology, oncology, orthopedic surgery, otorhinolaryngology, ophthalmology, allergology, and rheumatology.
