

1. Record Nr.	UNINA9910896531203321
Titolo	Chemistry and Biology of O-GlcNAcylation // edited by Wen Yi
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9748-64-X
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (178 pages)
Disciplina	572.68
Soggetti	Medicine - Research Biology - Research Cytology Biomedical Research Cell Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1. Chemical tools for decoding the functions of O-GlcNAcylation -- Chapter 2. Profiling O-GlcNAcylation with mass spectrometry -- Chapter 3. O-GlcNAcylation and cell metabolism -- Chapter 4. O-GlcNAcylation and transcriptional regulation and epigenetics -- Chapter 5. O-GlcNAcylation and signal transduction -- Chapter 6. O-GlcNAcylation and stem cells -- Chapter 7. O-GlcNAcylation and immune regulation -- Chapter 8. O-GlcNAcylation and neuronal development, neurodegeneration and neurological disorders.
Sommario/riassunto	O-linked N-acetylglucosamine (O-GlcNAc) is a prevalent post-translational modification of numerous intracellular proteins. This modification has recently emerged as a key regulator of various important biological processes, including gene transcription, stress response, metabolic homeostasis, and immune regulation. Given the critical role of O-GlcNAc in normal physiology, increasing evidence has now demonstrated that deregulation of O-GlcNAc is closely associated with the development and progression of various diseases, including neurodegeneration, cardiovascular disease, and cancer. This book provides a comprehensive overview of the current progress and understanding of this modification in biology, and likely provides new

research directions in the future.
