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Nota di contenuto	Preface.-Chapter 1 Introduction/Overview -- Chapter 2 Structural Biology of the DJ-1 Superfamily -- Chapter 3 Expression of DJ-1 in patients with neurodegenerative diseases -- Chapter 4 DJ-1 as an oncogene and its clinical significance -- Chapter 5 Role of DJ-1 in fertilization -- Chapter 6 Anti-oxidative stress function of DJ-1 -- Chapter 7 Ttranscriptional regulation of DJ-1 -- Chapter 8 Regulation of Signal Transduction by DJ-1 -- Chapter 9 Protein repair by DJ-1 from glycation by glyoxal and methylglyoxal -- Chapter 10 DJ-1 as a biomarker of Parkinson's disease -- Chapter 11 Roles of DJ-1 in diabetes mellitus -- Chapter 12 Therapeutic activities of DJ-1 and its binding compounds against neurodegenerative diseases -- Chapter 13 DJ-1 as an oncogene and promising target for cancer chemotherapy. .
Sommario/riassunto	This book reviews the functions and roles of DJ-1 in various oxidative stress-related diseases and applications of DJ-1 and its binding compounds to the diseases. The DJ-1 gene was first found to be a novel oncogene in 1997 and later, in 2003, also found to be a causative

gene for a familial form of Parkinson’s disease (PD), park7. The DJ-1 gene is therefore the first gene discovered that is known to cause cancer and neurodenegerative diseases, including PD. The research field has expanded as the research has developed. Thus this volume begins with a general introduction of DJ-1, and explains the history and research development to understand the following chapters. Those chapters present the roles of DJ-1 in various oxidative stress-related diseases such as neurodegenerative diseases, as well as cancer, diabetes, and fertility. Moreover, several chapters present evidence that DJ-1 is useful for therapeutic strategies against these diseases. The reader will discover that DJ-1 is a promising protein both for basic cell biology and for the mechanism and therapy for oxidative stress-related diseases. .