

Title (en)  
UBIQUITIN CONJUGATING ENZYMES 7, 8 and 9

Title (de)  
UBIQUITIN-KONJUGIERTE ENZYME 7, 8 UND 9

Title (fr)  
ENZYMES 7, 8 ET 9 DE CONJUGAISON D'UBIQUITINE

Publication  
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Application  
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Priority  
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Abstract (en)  
[origin: WO9623410A1] Human UCE 7, UCE 8 and UCE 9 polypeptides and DNA (RNA) encoding such polypeptides and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods of utilizing such polypeptide for the treatment of the proliferation of malignant cells. Antagonists against such polypeptides and their uses as a therapeutic to treat Alzheimer's disease, atrophying skeletal muscle, African swine fever virus and apoptotic cell death are also disclosed. Also disclosed are diagnostic assays for detecting diseases related to mutations in UCE 7, 8 and 9 nucleic acid sequences and the concentration of polypeptides encoded by such sequences.

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Citation (search report)

- [E] WO 9518974 A2 19950713 - MITOTIX INC [US]
- [X] SIMON S. WING ET AL.: "Molecular cloning, expression and characterization of a ubiquitin conjugation enzyme (E217kB) highly expressed in rat testis", BIOCHEMICAL JOURNAL, vol. 305, no. 1, 1 January 1995 (1995-01-01), pages 125 - 132, XP002119403
- [X] NAVA BLUMENFELD ET AL.: "Purification and characterization of a novel species of Ubiquitin-carrier protein, E2, that is involved in degradation of non-"N-end Rule" protein substrates.", JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 269, no. 13, 1 April 1994 (1994-04-01), MD US, pages 9574 - 9581, XP002119400
- [X] PIERRE-ALAIN GIROD ET AL.: "Homologs of the essential ubiquitin conjugating enzymes UBC1, 4 and 5 in yeast are encoded by a multigene family in Arabidopsis thaliana", THE PLANT JOURNAL, vol. 3, no. 4, 1993, pages 545 - 552, XP002125332
- [X] WOLFGANG SEUFERT ET AL.: "UBIQUITIN-CONJUGATING ENZYMES UBC4 AND UBC5 MEDIATE SELECTIVE DEGRADATION OF SHORT-LIVED AND ABNORMAL PROTEINS", THE EMBO JOURNAL, vol. 9, no. 2, 1990, pages 543 - 550, XP002085131
- [X] SHILIANG QIN ET AL.: "Cloning and characterization of a Saccharomyces cerevisiae gene encoding a new member of the Ubiquitin-conjugating protein family", THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 266, no. 23, 1991, pages 15549 - 15554, XP002283981
- [X] PETER KAISER ET AL.: "A human Ubiquitin-conjugating enzyme homologous to yeast UBC8", THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 269, no. 12, 1994, pages 8797 - 8802, XP002283982
- See references of WO 9623410A1

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