BACKGROUND

Ubiquitination is an important molecular mechanism by which abnormal or short-lived proteins are targeted for degradation by the concerted efforts of at least three classes of enzymes: ubiquitin-activating enzymes (E1s), ubiquitin-conjugating enzymes (E2s) and ubiquitin-protein ligases (E3s). UBE2J1 (ubiquitin-conjugating enzyme E2 J1), also known as Ubc6p, CGI-76, NCUBE1, HSPC153 or HSPC205, is a 318 amino acid single-pass type IV membrane protein that belongs to the E2 ubiquitin-conjugating enzyme family and is involved in protein degradation. Localized to the membrane of the endoplasmic reticulum (ER), UBE2J1 catalyzes the attachment of ubiquitin to misfolded membrane proteins, thereby targeting them for proteasomal destruction. This ATP-dependent reaction yields AMP, a diphosphate and a ubiquitin-tagged protein and may be a method of quality control within the ER.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: UBE2J1 (human) mapping to 6q15; Ube2j1 (mouse) mapping to 4 A5.

SOURCE

UBE2J1 (18-Y) is a mouse monoclonal antibody raised against recombinant UBE2J1 of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.