

## MATERIAL DATA SHEET

### Ubiquitin Conjugating Enzyme Fractions, *mammalian* Cat. # F-340

The enzyme fractions supplied represent the full compliment of purified conjugation enzymes (E1, E2s, and E3s) that are found in mammalian Fraction II. Conjugation Fraction A contains predominantly E1 and E2 enzymes, while Conjugation Fraction B contains predominantly E3 and deubiquitinating enzymes. The enzymes have been tested and shown to work with typical [<sup>125</sup>I]-labeled substrate proteins such as lysozyme and  $\beta$ -lactoglobulin. These conjugation fractions contain deubiquitinating enzymes (DUBs) and ubiquitin C-terminal hydrolases (UCHs). The addition of ubiquitin aldehyde (**U-201**) is recommended for the inhibition of these activities to improve overall conjugate yield. The supplied fractions do not contain 20S or 26S proteasome degradation activity. If the substrate being conjugated requires E2 or E3 enzymes not found in Fraction II, the reaction can be supplemented with enzymes from Fraction I (**F-375**). Includes complimentary fractions for 2-5 conjugation reactions depending on conditions. Conjugation kit with solutions and protocol is also available in a kit format (**K-960**).

#### Product Information

**Stocks:** Conjugation Fraction A = X  $\mu$ g/ml, X  $\mu$ l (200  $\mu$ g total)  
Conjugation Fraction B = X  $\mu$ g/ml, X  $\mu$ l (200  $\mu$ g total)  
Actual concentration varies with specific Lot #.

#### Use & Storage

**Storage:** Store at -80°C. Avoid multiple freeze/thaw cycles.

#### Literature

**References:** Ciechanover A., *et al.* (1981) Proc. Natl. Acad. Sci. **78**:761-765  
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Hershko A., *et al.* (1980) Proc. Natl. Acad. Sci. **77**:1783-1786  
Hersko A., *et al.* (1983) J. Biol. Chem. **258**:8206-8214  
Hersko A., *et al.* (1985) Biophys. Biochem. Res. Comm. **128**:1079-1086  
Glickman M.H. and Ciechanover A. (2001) Physiol. Rev. **82**:373-428

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