
MATERIAL DATA SHEET

ISG15 Activating Enzyme, *human recombinant*
Cat. # E-308 (GST-tagged)

This E1 is responsible for the first step in ISG15-protein isopeptide bond formation. The enzyme catalyzes the activation of the C-terminal carboxyl group of ISG15 by forming a high-energy thioester bond in an ATP-dependent manner. The activated ISG15 is then transferred to UbcH8 and subsequently to lysine groups of target proteins via this thiolester conjugation cascade. The E1 enzyme is a critical component for the initiation of any *in vitro* conjugation reactions.

Product Information

Quantity:	50 µg
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 8.0, 100 mM NaCl. Actual concentration will vary with specific Lot #.
Purity:	> 95% by SDS-PAGE
MW:	138 kDa

Use & Storage

Use:	Typical enzyme concentration to support conjugation <i>in vitro</i> is 50-200 nM depending on conditions.
Storage:	Store at -80°C. Avoid multiple freeze/thaw cycles.

Literature

References:	Hemelaar J., <i>et al.</i> (2004) <u>Mol. Cell. Biol.</u> 24 :84-95 Yuan W., <i>et al.</i> (2001) <u>EMBO. J.</u> 20 : 362-371
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