



**LD Biopharma, Inc.**  
9924 Mesa Rim Road, Suite B  
San Diego, CA 92121  
Tel: 858-876-8266  
<http://www.ldbiopharma.com>

## - PRODUCT DATA SHEET -

**Name of Product:** Recombinant Human ENDOU Protein  
**Catalog Number:** hRP-1682  
**Manufacturer:** LD Biopharma, Inc.

### Introduction

Human poly(U)-specific endoribonuclease (ENDOU) gene encodes a protein with endoribonuclease & protease activities. It is highly specific expression in the placenta. Endoribonuclease that cleaves single-stranded RNAs at uridylates and releases products that have 2'-3'-cyclic phosphate termini. This protein may be useful as a tumor marker. Multiple alternatively spliced transcript variants have been found for this protein.

Full-length Human ENDOU cDNA (368aa, Isoform-II, derived from BC074729) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (33aa) fusion at its N-terminal. This protein was expressed in E.coli as inclusion bodies. The final product was refolded using our unique "temperature shift inclusion body refolding" technology and chromatographically purified.

**Gene Symbol:** ENDOU (P11; PP1; PRSS26)  
**Accession Number:** NP\_006016  
**Species:** Human  
**Size:** 50 µg / Vial  
**Composition:** 1.0 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, sucrose and DTT.  
**Storage:** In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

### Key References

Laneve P, et al., *The tumor marker human placental protein 11 is an endoribonuclease*. J. Biol. Chem. 283 (50), 34712-34719 (2008)

Grundmann U, et al., *Cloning and expression of a cDNA encoding human placental protein 11, a putative serine protease with diagnostic significance as a tumor marker*. DNA Cell



**LD Biopharma, Inc.**  
9924 Mesa Rim Road, Suite B  
San Diego, CA 92121  
Tel: 858-876-8266  
<http://www.ldbiopharma.com>

Biol. 9 (4), 243-250 (1990)

## **Applications**

1. May be used for in vitro ENDOU mediated placenta derived cell & tumor cells differentiation regulations study with this protein as either soluble factor or coating matrix protein.
2. May be used for ENDOU protein-protein interaction mapping.
3. Potential biomarker protein for clinical applications such as monitoring pancreatic cancer progression.
4. As antigen for specific antibody production.

## **Quality Control**

Purity: > 90% by SDS-PAGE.

## **Recombinant Protein Sequence**

MASMTGGQQMGRGRHHHHHGNLYFQGEFRACISLVLA VLCGLAWAEDHKESEPLPQLEEEETEEA  
LASNLYSAPTSCQGRCYEAFDKHHQCHCNARCQEFGNCKDFESLCS DHEVSHSSDAITKEEIQ  
SISEKIYRADTNKAQKEDIVLNSQNCISPSETRNQVDRCPKPLFTYVNEKLF SKPTYAAF INLL  
NNYQRATGHGEHFS AQELAEQDAFLREIMKTAVMKELYSFLHHQNR YGSEQEFVDDLKNMWFGL  
YSRGNEEGDSSGF EHVFSGEVKKGKVTGFHNWIRFYLEEKEGLVDYYSHIYDGPWDSYPDVLAM  
QFNWDGYYKEVGS AFIGSSPEFEFALYSLCFIARPGKVCQLSLGGYPLAVR TYTWDKSTYGN GK  
KYIATAYIVSST