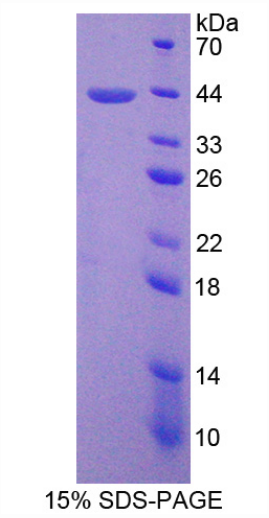
**RPB039Hu01 100μg**
**Recombinant Surfactant Associated Protein D (SPD)**
**Organism Species: Homo sapiens (Human)**
***Instruction manual***

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

10th Edition (Revised in Jan, 2014)

## [ PROPERTIES ]



15% SDS-PAGE

**Residues:** Ala21~Phe375
**Tags:** N-terminal His-Tag
**Accession:** P35247
**Host:** *E. coli*
**Subcellular Location:** Secreted, extracellular space, extracellular matrix, surface film.
**Purity:** >95%
**Endotoxin Level:** <1.0EU per 1μg (determined by the LAL method).
**Formulation:**Supplied as lyophilized form in PBS, pH7.4, containing 0.01% sarcosyl.
**Predicted isoelectric point:** 6.7
**Predicted Molecular Mass:** 37.0kDa
**Accurate Molecular Mass:** 43kDa as determined by SDS-PAGE reducing conditions.
**Applications:** SDS-PAGE; WB; ELISA; IP.
(May be suitable for use in other assays to be determined by the end user.)
**Note:** The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

## [ USAGE ]

Reconstitute in sterile PBS, pH7.2-pH7.4.

## [ STORAGE AND STABILITY ]

**Storage: Avoid repeated freeze/thaw cycles.**

Store at 2-8ºC for one month.

Aliquot and store at -80ºC for 12 months.

**Stability Test:** The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

## [ SEQUENCES ]

The sequence of the target protein is listed below.

AEMKTYSHRT MPSACTLVMC SSVESGLPGR DGRDGREGPR GEKGDPGLPG AAGQAGMPGQ AGPVGPKGDN GSVGEPGPKG DTGPSGPPGP PGVPGPAGRE GPLGKQGNIG PQGKPGPKGE AGPKGEVGAP GMQGSAGARG LAGPKGERGV PGERGVPGNT GAAGSAGAMG PQGSPGARGP PGLKGDKGIP GDKGAKGESG LPDVASLRQQ VEALQGQVQH LQAAFSQYKK VELFPNGQSV GEKIFKTAGF VKPFTEAQLL CTQAGGQLAS PRSAAENAAL QQLVVAKNEA AFLSMTDSKT EGKFTYPTGE SLVYSNWAPG EPNDDGGSED CVEIFTNGKW NDRACGEKRL VVCEF

## [ REFERENCES ]

1. Lu J., *et al.* (1992) Biochem. J. 284:795-802.
2. Crouch E., *et al.* (1993) J. Biol. Chem. 268:2976-2983.
3. Crouch E., *et al.* (1993) Am. J. Pathol. 142:241-248.
4. Ortega F.J., *et al.* (2013) Int. J. Obes. Relat. Metab. Disord. 37:1532-1538.