DATASHEET
Version 20181206

SP-D, Human

Cat. No.: Z03372-50

Size: 50.0 ug

Synonyms: SP-D; SFTPD; PSP-D; COLEC7; PSPD; SFTP4

Description:

Surfactant protein D is a member of the collectin family of innate immune modulators. It is constitutively secreted by alveolar lining cells and epithelium associated with tubular structures, that contains a N-terminal collagen-like domain and a C-terminal lectin domain that are characteristic of members of the collectin family of proteins, and also shows calcium-dependent binding to specific saccharides. Besides it is involved in the development of acute and chronic inflammation of the lung. Several human lung diseases are characterized by decreased levels of bronchoalveolar SP-D.
Recombinant Human SP-D produced in *HEK 293* cells is a polypeptide chain containing 355 amino acids. A fully biologically active molecule, rhSP-D has a molecular mass of 40-45 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 AEMKTYSHRT MPSACTLVMC SSVESGLPGR DGRDGREGPR
00041 GEKGDPGLPG AAGQAGMPGQ AGPVGPKGDN GSVGEPGPKG
00081 DTGPSGPPGP PGVPGPAGRE GPLGKQGNIG PQGKPGPKGE
00121 AGPKGEVGAP GMQGSAGARG LAGPKGERGV PGERGVPGNT
00161 GAAGSAGAMG PQGSPGARGP PGLKGDKGIP GDKGAKGESG
00201 LPDVASLRQQ VEALQGQVQH LQAAFSQYKK VELFPNGQSV
00241 GEKIFKTAGF VKPFTEAQLL CTQAGGQLAS PRSAAENAAL
00281 QQLVVAKNEA AFLSMTDSKT EGKFTYPTGE SLVYSNWAPG
00321 EPNDDGGSED CVEIFTNGKW NDRACGEKRL VVCEF
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Source: *HEK293*

Species: Human

Molecular Weight: 40-45kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized from a 0.2 μm filtered solution in PBS.

Reconstitution: Reconstituted in ddH_2O or PBS at 100 μg/ml.

Purity: > 98% as analyzed by reducing SDS-PAGE.

Endotoxin Level: <0.2 EU/μg, determined by LAL

Storage: Lyophilized recombinant Human SP-D remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human SP-D should be stable up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

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