

Prolactin-Inducible Protein NATIVE, Human seminal plasma

Product Data Sheet

Type: Native

Tag: Tagless

Source: Human seminal plasma

Species: Human

Other names: Gross cystic disease fluid protein 15, Prolactin-induced protein, Secretory actin-binding protein, GCDFP15, GPII4, SABP, GP17, PIP

Cat. No.:

RD164304050 (0.05 mg)

Description

Native protein isolated from pooled human seminal plasma, 118 AA, MW 13,52 kDa (calculated without glycosylation). Protein identity confirmed by LC-MS/MS (NCBI no. gi|4505821).

Introduction to the Molecule

Prolactin inducible protein (PIP) is a 17-kDa glycoprotein found in human seminal plasma. PIP is synthesized as a 146-amino acid long polypeptide and shows high sequence similarity with mouse submaxillary gland with a single glycosylation site. PIP is also known as gross cystic breast cyst fluid protein-15 (GCDFP-15) and a marker of human primary and metastatic apocrine breast carcinomas. Furthermore, it is a gp 17/secretory actin binding protein (SABP)/extra-parotid glycoprotein (EP-GP), which is a secretory glycoprotein isolated from seminal vesicles, salivary glands and sweat glands. The exact biological functions of PIP are still uncertain but various functions have been assigned to it due to its occurrence at high concentration in biological fluids. PIP binds to many proteins such as fibrinogen, actin, keratin, myosin and tropomyosin. PIP is expressed in pathological conditions of the mammary gland and in several exocrine tissues, such as the lacrimal, salivary, and sweat glands. PIP has been used in diagnostic evaluation of tumors of breast, salivary gland, and skin, because of its association with secretory cell differentiation.

Amino Acid Sequence

QDNTRKIIIK NFDIPKSVRP NDEVTAVLAV QTELKECMVV KTYLISSIPL QGAFNYKYTA CLCDDNPETF YWDFYTNRTV
QIAAVVDVIR ELGICPDDAA VIPIKNNRFY TIEILKVE

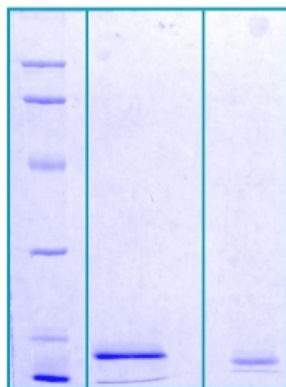
Source

Human seminal plasma

Purity

>95%

SDS-PAGE gel



SDS-PAGE analysis of Prolactin-Inducible Protein native protein,
12% gel stained with Coomassie Brilliant Blue G250

- 1) M.W. marker - 14, 21, 31, 45, 66, 97 kDa
- 2) reduced and boiled sample, 2.5µg/lane
- 3) non-reduced and non-boiled sample, 2.5µg/lane

Endotoxin

< 1.0 EU/ug

Formulation

Filtered (0,4 µm) and lyophilized in 0.5 mg/mL in 0,05M phosphate buffer, 0,075M NaCl, pH 8,0.

Reconstitution

Add deionized water to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store lyophilized protein at -80°C. Lyophilized protein remains stable until the expiry date when stored at -80°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after one week at 4°C.

Quality Control Test

BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

LAL to determine quantity of endotoxine.

Applications

Cell culture and/or animal studies, ELISA, Immunological methods, Western blotting

Note

All samples used for protein preparation were tested and found negative for HBsAg, HIV1,2, HCV, syphilis, aHBc, RRR. Since no test can absolutely assure the absence of all infectious agents, this product should be handled as a potential biohazard. This product is intended for research use only.

Gentaur Molecular Products
Voortstraat 49
1910 Kampenhout, Belgium
<http://www.gentaur-worldwide.com>