

ARG81248 Human MUC-4 ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG81248 Human MUC-4 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human MUC-4 in serum or plasma.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	MUC4
Conjugation	HRP
Conjugation Note	Read at 450 nm.
Sensitivity	60 pg/ml
Sample Type	Serum or plasma.
Standard Range	312.5 - 20000 pg/ml
Sample Volume	100 µl
Alternate Names	ASGP-1; ASGP-2; HSA276359; MUC-4; Mucin-4; Pancreatic adenocarcinoma mucin; Ascites sialoglycoprotein 1; Tracheobronchial mucin; ASGP; Testis mucin; Ascites sialoglycoprotein 2; Ascites sialoglycoprotein

Application Instructions

Assay Time	~ 3 hours
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	MUC4
Gene Full Name	mucin 4, cell surface associated
Background	The major constituents of mucus, the viscous secretion that covers epithelial surfaces such as those in the trachea, colon, and cervix, are highly glycosylated proteins called mucins. These glycoproteins play important roles in the protection of the epithelial cells and have been implicated in epithelial renewal and differentiation. This gene encodes an integral membrane glycoprotein found on the cell surface, although secreted isoforms may exist. At least two dozen transcript variants of this gene have been found, although for many of them the full-length transcript has not been determined or they are found only in tumor tissues. This gene contains a region in the coding sequence which has a variable number

(>100) of 48 nt tandem repeats. [provided by RefSeq, Jul 2008]

Function

May play a role in tumor progression. Ability to promote tumor growth may be mainly due to repression of apoptosis as opposed to proliferation. Has anti-adhesive properties. Seems to alter cellular behavior through both anti-adhesive effects on cell-cell and cell-extracellular matrix interactions and in its ability to act as an intramembrane ligand for ERBB2. Plays an important role in cell proliferation and differentiation of epithelial cells by inducing specific phosphorylation of ERBB2. The MUC4-ERBB2 complex causes site-specific phosphorylation of the ERBB2 'Tyr-1248'. In polarized epithelial cells segregates ERBB2 and other ERBB receptors and prevents ERBB2 from acting as a coreceptor. The interaction with ERBB2 leads to enhanced expression of CDKN1B. The formation of a MUC4-ERBB2-ERBB3-NRG1 complex leads to down-regulation of CDKN1B, resulting in repression of apoptosis and stimulation of proliferation. [UniProt]

Highlight

Related products:

[MUC4 antibodies](#); [MUC4 ELISA Kits](#);

New ELISA data calculation tool:

[Simplify the ELISA analysis by GainData](#)

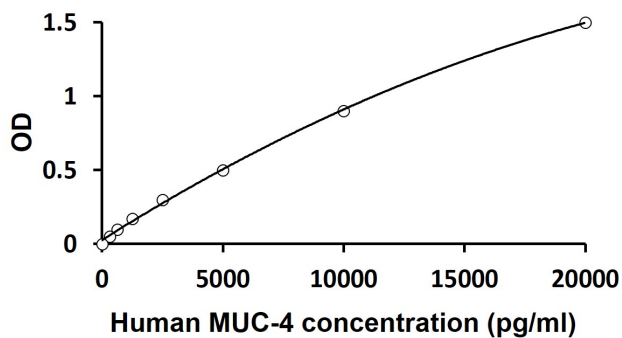
PTM

Proteolytically cleaved into 2 chains, mucin-4 alpha chain and mucin-4 beta chain.

mucin-4 alpha chain is highly O-glycosylated.

mucin-4 beta chain is predominantly N-glycosylated.

Images



ARG81248 Human MUC-4 ELISA Kit standard curve image

ARG81248 Human MUC-4 ELISA Kit results of a typical standard run with optical density reading at 450 nm.