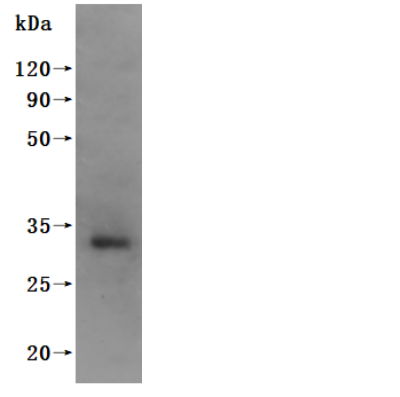
Recombinant Human Kita-kyushu lung cancer antigen 1 (CT83)-VLPs

Product Code	CSB-MP711093HU
Abbreviation	Recombinant Human CT83 protein-VLPs
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q5H943
Form	Lyophilized powder
Storage Buffer	PBS, pH 7.4, 6% trehalose
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Sequence	MNFYLLLASSILCALIVFWKYRRFQRNTGEMSSNSTALALVRPSSSGLINSNTDNNLAVYDLSRDILNNFPHSIARQKRILVNLSMVENKLVELEHTLLSKGFRGASPHRKST
Research Area	Cardiovascular
Source	Mammalian cell
Target Names	CT83
Expression Region	1-113aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged(This tag can be tested only under denaturing conditions)
Mol. Weight	14.0 kDa
Protein Length	Full Length
Image	



CSB-MP711093HU is detected by Mouse anti-6*His monoclonal antibody.

Description

CT83, also known as CXorf61 or KK-LC-1, is a small protein of 113 amino acids with unknown function, primarily expressed in mature sperm [1]. However, CT83 is also identified as a tumor antigen expressed in various cancer tissues and testicular germ cells [2]. It is a member of the cancer-testis antigenic protein family and is exclusively expressed in malignant tumor tissue and testicular germ cells [3]. The Human Protein Atlas data revealed that CT83 transcripts were expressed in lung, stomach, colorectal, urothelial, cervix, and breast cancers, as well as in various tumor cell lines [4]. Additionally, CT83, also known as Kita-Kyushu lung cancer antigen-1 (KK-LC-1), has been recognized as a cancer-testis antigen overexpressed in liver cancer [5]. Furthermore, CT83 has been identified as a CTA recognized by cytotoxic T lymphocytes [6]. It is important to note that CT83 does not appear to be expressed by vital human tissues, as it was not detected in a panel of non-neural (except germ cells) and neural tissues [7]. Moreover, CT83 has been suggested as a potential target in lung cancer and has been found to be expressed in 65% of triple-negative breast cancer cases [8].

References:

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[3] J. Chen, A. Wang, G. Lyu, K. Zhou, J. Ke, X. Jiet al., "An innovative prognostic model based on four genes in asian patient with gastric cancer", SSRN Electronic Journal, 2019. https://doi.org/10.2139/ssrn.3391354
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[6] J. Ji, J. Chen, A. Wang, W. Zhang, H. Ju, Y. Liuet al., "Kk-lc-1 may be an effective prognostic biomarker for gastric cancer",, 2020. https://doi.org/10.21203/rs.3.rs-50773/v2
[7] B. Marcinkowski, S. Stevanovi?, S. Helman, S. Norberg, C. Serna, B. Jinet al., "Cancer targeting by tcr gene-engineered t cells directed against kita-kyushu lung cancer antigen-1", Journal for Immunotherapy of Cancer, vol. 7, no. 1, 2019. https://doi.org/10.1186/s40425-019-0678-x
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Endotoxin	Less than 1.0 EU/ug as determined by LAL method.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.