# abcam

### **Product datasheet**

### Anti-MUC4 antibody [5B12] ab60720

★★★★★ <u>2 Abreviews</u> <u>22 References</u> 画像数 3

製品の概要	
製品名	Anti-MUC4 antibody [5B12]
製品の詳細	Mouse monoclonal [5B12] to MUC4
由来種	Mouse
アプリケーション	適用あり: WB, IHC-P, Flow Cyt
種交差性	交差種: Human
免疫原	Recombinant fragment with tag: GVSLFPYGAD AGDLEFVRRT VDFTSPLFKP ATGFPLGSSL RDSLYFTDNG QIIFPESDYQ IFSYPNPLPT GFTGRDPVAL VAPFWDDADF STGRGTTFYQ EYETFYGEHS, corresponding to amino acids 79-189 of Human MUC4
ポジティブ・コントロール	WB: HeLa cell lysate. IHC-P: Human stomach tissue. Flow Cyt: A549 cells.
特記事項	This product was changed from ascites to tissue culture supernatant on 12 Feb 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.
	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

製品の特性	
製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	pH: 7.4 Constituent: PBS
精製度	Tissue culture supernatant
ポリ/モノ	モノクローナル
クローン名	5B12

### アプリケーション

## The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab60720の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

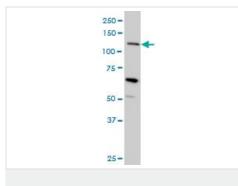
アプリケーション	Abreviews	特記事項
WB	* * * * * <u>(1)</u>	Use at an assay dependent concentration. Detects a band of approximately 120 kDa (predicted molecular weight: 235 kDa).
IHC-P	<b>★ ★ ★ ☆ ☆ ☆ (1)</b>	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. <u>ab170191</u> - Mouse monoclonal lgG2a, is suitable for use as an isotype control with this antibody.

### ターゲット情報

機能	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 segragates 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.
組織特異性	Expressed in the thymus, thyroid, lung, trachea, esophagus, stomach, small intestine, colon, testis, prostate, ovary, uterus, placenta, and mammary and salivary glands. Expressed in carcinomas arising from some of these epithelia, such as lung cancers, squamous cell carcinomas of the upper aerodigestive tract, mammary carcinomas, biliary tract, colon, and cervix cancers. Minimally or not expressed in the normal pancreas or chronic pancreatitis, but is highly expressed in pancreatic tumors and pancreatic tumor cell lines.
配列類似性	Contains 1 AMOP domain. Contains 2 EGF-like domains. Contains 1 NIDO domain. Contains 1 VWFD domain.
発生段階	Expressed early in the primitive gut before respiratory and digestive epithelial cells have acquired their tissue and cell specificity. Expressed at the basal surface of the epithelium from week 14 to 26 weeks and then predominantly localized in only parietal cells. Immediately before birth, found in the cytoplasm of the mucous columnar epithelial cells. In the embryo expressed in skin, then disappears late in gestation.
翻訳後修飾	Proteolytically cleaved into 2 chains, mucin-4 alpha chain and mucin-4 beta chain. mucrnin-4 alpha chain is highly O-glycosylated. mucin-4 beta chain is predominantly N-glycosylated.

Secreted; Cell membrane and Membrane. Secreted. Isoforms lacking the Cys-rich region, EGFlike domains and transmembrane region are secreted. Secretion occurs by splicing or proteolytic processing.

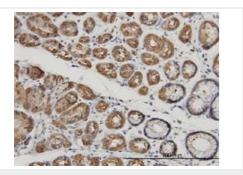
#### 画像



Western blot - Anti-MUC4 antibody [5B12] (ab60720) Anti-MUC4 antibody [5B12] (ab60720) at 1  $\mu g/ml$  + HeLa cell lysate at 25  $\mu g$ 

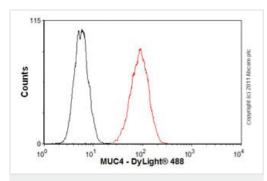
Predicted band size: 235 kDa Observed band size: 120 kDa Additional bands at: 52 kDa, 65 kDa. We are unsure as to the identity of these extra bands.

This image was generated using the ascites version of the product.



MUC4 antibody (ab60720) used in immunohistochemistry at 3ug/mL on formalin fixed and paraffin embedded human stomach. This image was generated using the ascites version of the product.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MUC4 antibody [5B12] (ab60720)



Flow Cytometry - Anti-MUC4 antibody [5B12] (ab60720)

Overlay histogram showing A549 cells stained with ab60720 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab60720,  $0.5\mu g/1x10^6$  cells) for 30 min at 22°C. The secondary antibody used was DyLight<sup>®</sup> 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG2a [ICIGG2A] (ab91361,  $1\mu g/1x10^6$  cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in A549 cells fixed with 4%

the same conditions.

This image was generated using the ascites version of the product.

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