Squamous Cell Carcinoma Antigen 1 Monoclonal Mouse Antibody (CPTC-SERPINB3-2)



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Product Description

Metastasis of a primary tumor to a distant site is determined through signaling cascades that break down interactions between the cell and extracellular matrix proteins. Among the proteins mediating metastasis are serine proteases, such as neutrophil elastase. Serpins are family of serine protease inhibitors, contain a stretch of peptide that mimics a true substrate for a corresponding serine protease. Serine proteases bind to this substrate mimic in a 1:1 stoichiometric fashion and become catalytically inactive. Aberrant expression of serpin family members can contribute to a number of conditions, including emphysema (-1 antitrypsin deficiency), fatal bleeding (elastase to Thrombin specificity) and thrombosis (antithrombin deficiency), and are indicators of cancer stage phenotypes (circulating levels of squamous cell carcinoma antigen, known as SCCA1, increase in advancing stages of some cervical, lung, esophageal and head and neck cancers). SCCA1 expression has been demonstrated to promote oncogenic transformation and epithelial-mesenchymal transition (EMT) in mammary epithelial cells, and its silencing in breast cancer cells has been shown to halt their proliferation.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

References

Note: References for this clone sold by other suppliers may be listed for expected applications.

Wellcome Open Res (2018) 3: 51. (WB)

Product attributes				
Antibody number	#2250			
Antibody reactivity (target)	Squamous Cell Carcinoma Antigen 1			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	CPTC-SERPINB3-2			
Isotype	IgG1, kappa			
Molecular weight	39 kDa			
Synonyms	HsT1196; Protein T4 A; Protein T4-A; SCC; SCCA-PD; SCCA1; SCCAPD; Serine (or cysteine) proteinase inhibitor clade B (ovalbumin) member 3; Serpin B3; SERPINB3; Squamous cell carcinoma antigen 1; T4 A; T4-A			
Human gene symbol	SERPINB3			
Entrez gene ID	6317			
SwissProt	P29508			
Unigene	227948			
Immunogen	Recombinant human full-length SERPINB3 protein			
Antibody target cellular	Cytoplasmic			
Species reactivity	Human			
Expected antibody	WB (published for clone)			
Antibody application notes	Western blot 0.5-1.0 ug/mL; Optimal dilution for a specific application should be determined.			
Positive control	U-2197, HaCaT, Squamous cells. Expressed in some hepatocellular carcinoma.			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide			
	Monospecific			
Validated in protein array				
Validated in protein array Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			

Email: btinfo@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

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