

**Rabbit Anti-SS18-SSX [MD234R]: RM0091, RM0091RTU7**

**Intended Use:** For Research Use Only

**Description:** SS18 protein is a part of the SWI/SNF complex. The SS18-SSX fusion oncoprotein is a result of in-frame fusions that fuse the SS18 gene on chromosome 18 with SSX1, SSX2, and SSX4 on X chromosome gene. Human synovial sarcoma (SS) accounts for 8-10% of all soft tissue malignancies and 95% of these malignancies express the recurrent translocation of the SS18 gene on chromosome 18. IHC is routinely used in differential diagnosis because the diagnosis of synovial sarcoma is challenging due to histologic overlap with a range of other tumors. The N-terminal SNH domain of the SS18 interacts with BAF (mSWI/SNF) chromatin remodeling complexes via the N terminal region of BRM and BRG1 subunits. Endogenous SS18 competes with the mutant SS18-SSX fusion for occupancy in the SWI/SNF complexes resulting in the displacement of BAF47 (SNF5) subunit which results in altered function of the SWI/SNF complex thus to deregulated expression of genes such as Sox2 in SS.

**Specifications:**

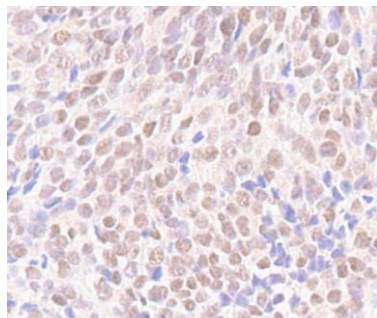
Clone: MD234R  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human  
 Immunogen: Synthetic peptide corresponding to human SS18-SSX fusion protein  
 Localization: Nucleus  
 Formulation: Antibody in PBS pH7.4, containing BSA, and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
SS18-SSX Concentrated	RM0091	1 ml
SS18-SSX Prediluted	RM0091RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Synovial sarcoma, cervical carcinoma  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 min Pressure Cooker or 30-60 min water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human synovial sarcoma stained with anti-SS18-SSX using DAB

**References:**

1. A Novel SS18-SSX Fusion-specific Antibody for the Diagnosis of Synovial Sarcoma. Esther Baranov, et al. Am J Surg Pathol. Jul;44(7):922-933, 2020. doi: 10.1097/PAS.0000000000001447.
2. When used together SS18-SSX fusion-specific and SSX C-terminus immunohistochemistry are highly specific and sensitive for the diagnosis of synovial sarcoma and can replace FISH or molecular testing in most cases. Matthew Zaborowski, et al. Histopathology. Oct;77(4):588-600, 2020. doi: 10.1111/his.14190.