Anti-MCM2, mouse monoclonal (BS18)

BSH-7698-100 (0.1ml), BSH-7698-1 (1 ml)

Clonality:	Mouse monoclonal antibody
Clone:	BS18
Application:	IHC-P (1:100 – 1:400), IHC-Fro
Species Reactivity:	Human
Control tissues:	Tonsil, appendix
Buffer:	TRIS with 0.03% sodium azide, pH 7.2
Storage:	Store at 4°C

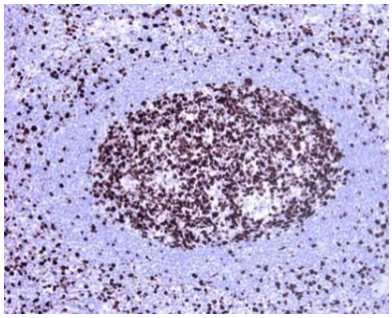
Description

The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are involved in the initiation of eukaryotic genome replication. The hexameric protein complex formed by MCM proteins is a key component of the pre-replication complex (pre RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. This protein forms a complex with MCM4, 6, and 7, and has been shown to regulate the helicase activity of the complex. MCM2 is localized in the nucleus and it is expressed during interphase. MCM2 is essential protein in cell cycle and it is needed for entry into the S phase and cell division. MCM2 is a proliferation marker and it is useful for identification of premalignant lesions and evaluation of proliferation indexes.

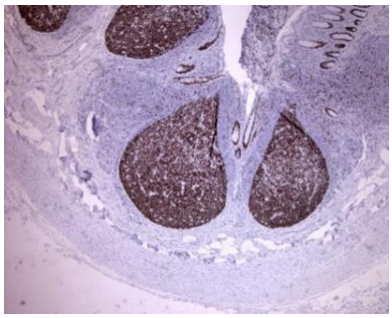
Protocol

1. Deparaffinize and rehydrate tissue section
2. Wash: aqua dest, 2×5 min
3. Pre-treatment: PT-module HIER pH 9.0 (20min at 98°C)
4. H_2O_2 (concentration 3%), 10 min
5. Wash: PBS or TBS buffer, 2×5 min
6. Primary antibody diluted as recommended, 30 min
7. Wash: PBS or TBS buffer, 2×5 min
8. One step HRP-polymer detection, 30 min
9. Wash: PBS or TBS buffer, 2×5 min
10. DAB Substrate, 8 min
11. Wash: aqua dest, 2×2 min
12. Counterstain, dehydrate and coverslip

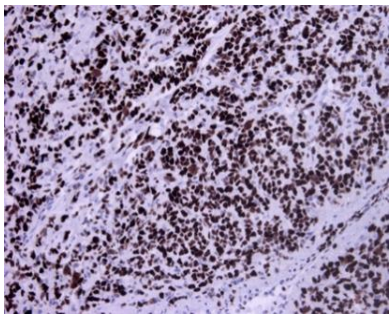
Dilution of concentrated antibody depends on the pre-treatment method and detection system used. Above protocol used in Optibodies evaluation and is meant as a reference. Final working dilution and protocol applied needs to be determined by the user always.



Tonsil section has been stained using MCM2 optibody (Clone: BS18) with 1:200 dilution. Proliferating cells have strong label in the germinal center.



Appendix section has been stained using MCM2 optibody (Clone: BS18) with 1:200 dilution. Proliferating cells have strong label in the germinal center of appendix. Also basal cells of intestilan crypts have strong nuclear label.



Ductal breast cancer section has been stained using MCM2 optibody (Clone: BS18) with 1:200 dilution. Proliferate carcinoma cells have strong nuclear label.