# Estrogen Receptor (ER) [SP1]

Concentrated and Prediluted Rabbit Monoclonal Antibody 903-301-111517



**OAA 301 T60 Catalog Number:** ACA 301 A, B, C **APA 301 AA, H Description:** 0.1, 0.5, 1.0 ml, concentrated 6.0, 25 ml, prediluted 60 tests, prediluted **Dilution:** 1:100 Ready-to-use Ready-to-use Diluent: Renoir Red N/A N/A

#### **Intended Use:**

Analyte Specific Reagent. Analytical and performance characteristics are not established.

## **Summary & Explanation:**

Human estrogen receptor (ER) is a 66 kDa protein that acts as an estrogen-dependent, nuclear hormone receptor. Studies have shown ER is present in the nuclei of epithelial cells in normal breast and endometrial tissues, as well as a subset of breast carcinomas. The SP1 clone is a high affinity rabbit monoclonal antibody directed against an epitope of the C-terminus of the ER protein (1). SP1 has been shown to stain formalin-fixed paraffin-embedded tissues. The robustness of SP1 has been demonstrated by successful immunohistochemistry using lower temperatures for antigen retrieval (e.g. 80 or 95°C), and in some instances, staining can be obtained even without antigen retrieval (2-3).

Source: Rabbit monoclonal

Clone: SP1 Isotype: IqG

**Known Applications:** 

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

Supplied As:

Buffer with protein carrier and preservative

#### Storage and Stability:

Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

### **Analyte Specific Reagent Note:**

ACA/APA301 have been quality controlled by IHC using Biocare's MACH 4 Universal HRP Polymer Detection. Quality control of OAA301 has been performed by IHC using the ONCORE Automated Slide Stainer with Rabbit HRP Detection, pH 6 heat-induced epitope retrieval at 95°C and DS2. However, it is the responsibility of the laboratory or the end-user to develop their own protocol and label appropriate disclaimer.

#### References:

- 1. Cheang MC, et al. Immunohistochemical detection using the new rabbit monoclonal antibody SP1 of estrogen receptor in breast cancer is superior to mouse monoclonal antibody 1D5 in predicting survival. J Clin Oncol. 2006 Dec;24(36):5637-44.
- 2. Rossi S, et al. Rabbit monoclonal antibodies: a comparative study between a novel category of immunoreagents and the corresponding mouse monoclonal antibodies. Am J Clin Pathol. 2005 Aug;124(2):295-
- 3. Cano G, et al. Estimation of hormone receptor status in fine-needle aspirates and paraffin-embedded sections from breast cancer using the novel rabbit monoclonal antibodies SP1 and SP2. Diagn Cytopathol. 2003 Oct; 29(4):207-11.
- 4. Rocha R, et al. Rabbit monoclonal antibodies show higher sensitivity than mouse monoclonals for estrogen and progesterone receptor evaluation in breast cancer by immunohistochemstry. Pathol Res Pract. 2008; 204(9):655-62.
- 5. Center for Disease Control Manual. Guide: Safety Management, NO. CDC-22, Atlanta, GA. April 30, 1976 "Decontamination of Laboratory Sink Drains to Remove Azide Salts."
- 6. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline-Fourth Edition CLSI document M29-A4 Wayne, PA 2014.

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