



# Anti-E2F7 (C-terminal half) monoclonal antibody, clone 25D4.3 (CABT-B1182)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

Specificity	Clone 25D4.3 recognizes an internal epitope of human E2F-7 present in all three spliced isoforms reported by UniProt (Q96AV8).
Immunogen	GST-tagged recombinant human E2F-7 internal fragment.
Isotype	lgG2b, κ
Source/Host	Mouse
Species Reactivity	Human, Mouse
Clone	25D4.3
Purification	Protein G purified
Conjugate	Unconjugated
Applications	WB, ICC
Epitope	Internal (C-terminal half).
Molecular Weight	~100 kDa observed. 99.89 kDa (isoform 1; E2F7b), 80.87 kDa (isoform 2; E2F7a), 98.35 kDa (isoform 3) calculated. Uncharacterized band(s) may appear in some lysates.
Format	Liquid
Concentration	Please refer to lot specific datasheet.
Size	100 μg
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl with 0.05% sodium azide.

45-1 Ramsey Road, Shirley, NY 11967, USA

Email: info@creative-diagnostics.com

Tel: 1-631-624-4882 Fax: 1-631-938-8221

**Storage** Stable for 1 year at 2-8°C from date of receipt.

#### **BACKGROUND**

#### Introduction

Transcription factor E2F7 (UniProt Q96AV8; also known as E2F-7) is encoded by the E2F7 gene (Gene ID 144455) in human. The E2F family of transcription factors (E2F) regulate genes involved in cell proliferation, differentiation and apoptosis. E2F1, 2, 3a function as transcription activators, while other family members (E2F3b, 4, 5, 6, 7, 8) are known as transcription repressors. Upregulated E2F7 is found in tamoxifen-resistant breast cancer cells, where it is responsible for transcriptional repression of miR-15a/16. Exogenous expression of miR-15a/16 or silencing E2F7 re-sensitizes breast cancer cells to tamoxifen-induced cell cycle arrest and apoptosis. Upregulated E2F7 expression is also reported in cutaneous squamous cell carcinomas (CSCC) and and head and neck SCC (HNSCC), where E2F7-dependent Sphk1 overexpression in SCC results in an elevated production of the antiapoptotic phospholipid, sphingosine-1-phosphate (S1P), which in turn invokes anthracycline resistance via activation of the PI3K/AKT pathway.

### **GENE INFORMATION**

Entrez Gene ID 144455

UniProt ID Q96AV8

Email: info@creative-diagnostics.com