

# Floxed-Fbxw7 Mouse

**Catalogue number:** 153593

**Sub-type:** Mouse

**Images:**

## Contributor

**Inventor:** Abdolrahman Shams-Nateri

**Institute:** University of Nottingham

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** Floxed-Fbxw7 Mouse

**Alternate name:** F-box/WD repeatâ??containing protein 7, CDC4, Sel1, Ago, Fbw7, SCF, Skp1/Cullin/F-box protein, E3 ubiquitin ligase complex,FBW6, FBX3, FBXO3, FBXW6, SEL-1, hAgo, hCdc4

**Class:**

**Conjugate:**

**Description:** Fbxw7 is a member of the F-box protein family, characterised by a motif of approximately 40 amino acids called the F-box. These proteins constitute one of the four subunits of ubiquitin protein ligase complex called SKP1-cullin-F-box and function in phosphorylation-dependent ubiquitination. Fbxw7 specifically protein contains 7 tandem solenoid protein domains also know as WD40 repeats. Fbw7 binds directly to cyclin E and probably targets it for ubiquitin-mediated degradation. There are 3 classes of F-box proteins: Fbws containing WD-40 domains Fbls containing leucine-rich repeats Fbxs containing either different protein-protein interaction modules or no recognizable motifs Mutations in Fbw7 are known to be detected in several cancers, including ovarian, breast and colorectal cancer. Indications like these identify the Fbw7 gene's potential role in the pathogenesis of human cancers.

**Purpose:**

**Parental cell:**

**Organism:**

**Tissue:**

**Model:** Conditional KO

**Gender:**

**Isotype:**

**Reactivity:**

**Selectivity:**

**Host:**

**Immunogen:**

**Immunogen UNIPROT ID:**

**Sequence:**

**Growth properties:**

**Production details:** A targeting construct was engineered where exon 5 of the Fbxw7 gene was flanked with two LoxP sites and located near a pPGK -NeoR cassette flanked by two FRT sites. This fragment was subcloned into pDT vector and linearized before being electroporated into embryonic stem cells., selected and the Fbxw7 mouse was generated according to standard protocols.

**Formulation:**

**Recommended controls:**

**Bacterial resistance:**

**Selectable markers:**

**Additional notes:**

## Target details

**Target:** Fbxw7

**Target alternate names:**

**Target background:**

**Molecular weight:**

**Ic50:**

## Applications

**Application:**

**Application notes:**

## Handling

**Format:**

**Concentration:**

**Passage number:**

**Growth medium:**

**Temperature:**

**Atmosphere:**

**Volume:**

**Storage medium:**

**Storage buffer:**

**Storage conditions:**

**Shipping conditions:** Embryo/Spermatozoa- Dry Ice

## Related tools

**Related tools:** Double Floxed Fbxw7/FoxM1

## References

**References:**

CancerTools.org