



## Mouse Monoclonal Antibody Against the Sigma70 Subunit of *E. coli* RNA Polymerase

**WARF: P07502US**

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**The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in developing a mouse monoclonal antibody against an *E. coli* sigma factor.**

### Overview

RNA polymerase is the enzyme responsible for DNA transcription, the process of making an RNA copy of a DNA gene sequence. Transcription begins at DNA sequences called promoters. In bacteria, a sigma factor directs the polymerase to gene promoters, ensuring that transcription occurs only where it is supposed to.

### The Invention

UW-Madison researchers have developed a mouse monoclonal antibody (mAb) against an *E. coli* sigma factor. Known as 2F8, this mAb specifically recognizes the sigma70 transcription factor, which is the main sigma factor.

### Applications

- Chromatin immunoprecipitation (ChIP), Western blot and immunoprecipitation (IP) experiments

#### Publications

- Raffaele M., Kanin E.I., Vogt J., Burgess R.R. and Ansari A.Z. 2005. Holoenzyme Switching and Stochastic Release of Sigma Factors from RNA Polymerase *in Vivo*. *Mol. Cell.* 22, 357-366.

#### Tech Fields

- [Research Tools : Antibodies](#)

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