Research Tools

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

WARF: P07502US

Inventors: Richard Burgess, Nancy Thompson

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

- Raffaelle 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

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854