

## Product Information

### Anti-Brachyury

produced in rabbit, affinity isolated antibody

Catalog Number **B8436**

### Product Description

Anti-Brachyury is produced in rabbit using as immunogen a synthetic peptide corresponding to an internal sequence of human brachyury (GenelD 6862). This sequence is 80% identical in mouse and 86% identical in rat. The antibody is affinity-purified using the immunizing peptide.

Anti-Brachyury recognizes human brachyury. Applications include the detection of brachyury by immunoblotting and immunohistochemistry.

The brachyury protein is required for the proper formation and differentiation of posterior mesoderm and for axial development in all vertebrates. The brachyury gene encodes a transcription factor that binds to a specific DNA element via its N-terminal region. A protein motif within the DNA-binding domain, the so-called T box, is highly conserved among T homologs from different species and also defines a broader family of T-box genes. Brachyury functions during the earlier stages of gastrulation, which suggests that at least one of its early roles is to regulate the morphogenetic behavior of nascent mesoderm by altering cell autonomous properties.

### Reagent

Supplied as a solution in phosphate buffered saline, containing 0.02% sodium azide.

Antibody concentration: ~1.0 mg/mL

### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

### Storage/Stability

For continuous use, store at 2-8 °C for up to three months. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended.

### Product Profile

**Immunoblotting:** a working dilution of 1:500 to 1:1,000 is recommended.

**Immunohistochemistry:** a working dilution of 1:100 to 1:250 is recommended.

**Note:** In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

### References

1. Abe, K., et al., Molecular and embryological characterization of a new transgene-induced null allele of mouse Brachyury locus. *Mammalian Genome* **11**: 238-240 (2000).
2. Edwards, Y. H., et al., The human homolog T of the mouse T (Brachyury) gene: gene structure, cDNA sequence, and assignment to chromosome 6q27. *Genome Res.* **6**: 226-233 (1996).
3. Huber, T. L., et al., Haemangioblast commitment is initiated in the primitive streak of the mouse embryo. *Nature* **432**: 625-630 (2004).
4. Jensen, L. E., et al., The human T locus and spina bifida risk. *Hum. Genet.* **115**: 475-482 (2004).

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