

Product datasheet for **DM3604P**

Twsg1 Rat Monoclonal Antibody [Clone ID: 7D19]

Product data:

Product Type:	Primary Antibodies
Clone Name:	7D19
Applications:	IHC, WB
Recommended Dilution:	Western Blot: 1/500-1/1000. Immunohistochemistry on Frozen Sections: 1/50-1/200.
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2
Clonality:	Monoclonal
Immunogen:	Purified Mouse Recombinant TSG
Specificity:	This antibody detects Mouse TSG. Other species not tested.
Formulation:	PBS State: Purified State: Lophilized purified (0.2 µm filtered) IgG fraction from Culture Supernatant Stabilizer: None
Reconstitution Method:	Restore with 200µl sterile PBS and the final concentration is 500µl/ml.
Purification:	Protein A/G Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at -70°C. Following reconstitution store the antibody (in aliquots) at -20°C for 6 month. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	twisted gastrulation BMP signaling modulator 1
Database Link:	Entrez Gene 65960 Mouse Q9EP52



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Background:

Twisted gastrulation (TSG) is a secreted, cysteine-rich protein that plays a role in dorsal/ventral patterning in *Drosophila* and *Xenopus* by regulating BMP signaling. TSG was originally identified in *Drosophila melanogaster* and shown to be required for the differentiation of the dorsal amnioserosa cells. Studies of expression and function of Twisted Gastrulation have been performed in *Drosophila* and *Xenopus*. *Xenopus* TSG is expressed in the ventral regions of the embryo during gastrulation, mimicking the BMP-4 expression pattern. TSG is expressed in dorsal cells of the blastoderm embryo, where there are also high levels of activity of Dpp and Screw. Vertebrate TSGs were subsequently cloned in mouse, human, zebrafish and frog. TSG acts as an agonist for BMP signaling by modulating the inhibitory actions of the BMP antagonist, Chordin/Sog, and the cleavage properties of the metalloprotease, xolloid/tolloid. The N-terminal domain of TSG can bind BMP protein directly in vitro and shows BMP antagonist activity.

Synonyms:

Twisted gastrulation protein homolog 1