

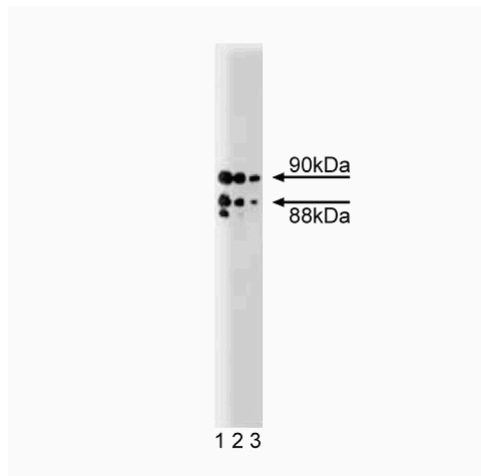
## Technical Data Sheet

**Purified Mouse Anti-GSPT2****Product Information**

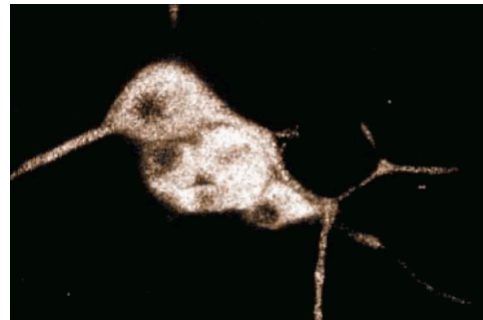
<b>Material Number:</b>	<b>611250</b>
<b>Size:</b>	50 µg
<b>Concentration:</b>	250 µg/ml
<b>Clone:</b>	32/GSPT2
<b>Immunogen:</b>	Mouse GSPT2 aa. 19-126
<b>Isotype:</b>	Mouse IgG1
<b>Reactivity:</b>	QC Testing: Rat Tested in Development: Mouse
<b>Target MW:</b>	88/90kDa
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

**Description**

Cell cycle progression is regulated by multiple genes at the G1 to S phase transition. The yeast *GST1* gene encodes a GTP-binding protein that can rescue the G1 to S phase transition. This function is conserved in the GST1 human homolog, GSPT1. GSPT1 is also thought to function in protein synthesis as a polypeptide chain releasing factor, eRF3. eRF3 facilitates ribosomal binding of eRF1, a factor which induces ribosomal release of the nascent peptide. In addition to a GSPT1 homolog, a second GSPT protein (GSPT2) has been identified in mice. These proteins have a unique N-terminal region, four conserved GTP-binding domains, and a C-terminal domain with homology to elongation factor-1α (EF1α). Although both GSPTs are expressed in a wide range of tissues, GSPT2 levels are elevated in the brain. GSPT1 expression transiently increases during the G1 to S phase transition, while GSPT2 levels remain constant during all phases of the cell cycle. Both proteins can bind eRF1 and may therefore function as eRF3. Thus, the GSPT proteins play important roles in cell cycle regulation and translation termination and may serve to link these essential biological processes.



**Western blot analysis of GSPT2 on rat brain lysate.**  
Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of GSPT2.



**PC12**

**Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at -20°C.

**Application Notes****Application**

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

**BD Biosciences**

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## Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

### References

Hoshino S, Imai M, Mizutani M. Molecular cloning of a novel member of the eukaryotic polypeptide chain-releasing factors (eRF). Its identification as eRF3 interacting with eRF1. *J Biol Chem.* 1998; 273(35):22254-22259.(Biology)