**Product Information**

**Anti-Jagged-1**
produced in goat, affinity isolated antibody

**Catalog Number** J4127

**Product Description**
Anti-Jagged-1 is produced in goat using purified recombinant rat jagged-1 extracellular domain expressed in mouse NSO cells as immunogen. The antibody is purified using rat jagged-1 affinity chromatography.

Anti-Jagged-1 may be used to localize and detect jagged-1 by immunoblotting, ELISA, and flow cytometry.

Jagged-1 is a notch ligand. The Notch signaling system regulates proliferation, differentiation and apoptosis in many tissues, including hematopoietic tissue. Notch is a family of transmembrane receptors activated by ligands such as jagged-1, jagged-2 and delta-1 that are expressed on adjacent cells. Hematopoietic stem cells and early progenitors express notch-1 and notch-2, whereas primary stromal cultures have been shown to express jagged-1, indicating that jagged-1 may play a role in nurturing progenitor cells within the hematopoietic microenvironment.² Cells engineered to express high levels of jagged-1 caused a four-fold increase in formation of hematopoietic progenitor cell colonies.³ However, without the presence of other cytokines that stimulate proliferation and maturation, such as IL-3, IL-6, SCF and G-CSF, jagged-1 actually decreased myeloid colony formation by CD34⁺ cells, suggesting that jagged-1 modulates cytokine signals and helps preserve CD34⁺ cells in an immature state.⁴

**Reagent**
Supplied as a lyophilized powder from a 0.2 μm filtered solution of phosphate buffered saline (PBS), pH 7.4, and 5% trehalose.

**Preparation Instructions**
To one vial of lyophilized powder, add 1 ml of 0.2 μm-filtered PBS to produce a 0.1 mg/ml stock solution of antibody. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

**Storage/Stability**
Prior to reconstitution, store at −20 °C. Reconstituted product may be stored at 2-8 °C for up to one month. For prolonged storage, freeze working aliquots at −20 °C. Avoid repeated freezing and thawing.

**Product Profile**
Capture ELISA: a working concentration of 0.2-0.8 μg/ml is recommended.

Immunoblotting: a working concentration of 0.1 μg/ml is determined using rat jagged-1 at 5 ng/lane under non-reducing conditions.

Flow cytometry: recommended use: 2.5 μg/10⁶ cells using rat cortical stem cells.

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

Endotoxin level is < 0.1 EU per 1 μg of antibody as determined by the LAL (Limulus amebocyte lysate) method.

**References**