

DESCRIPTION

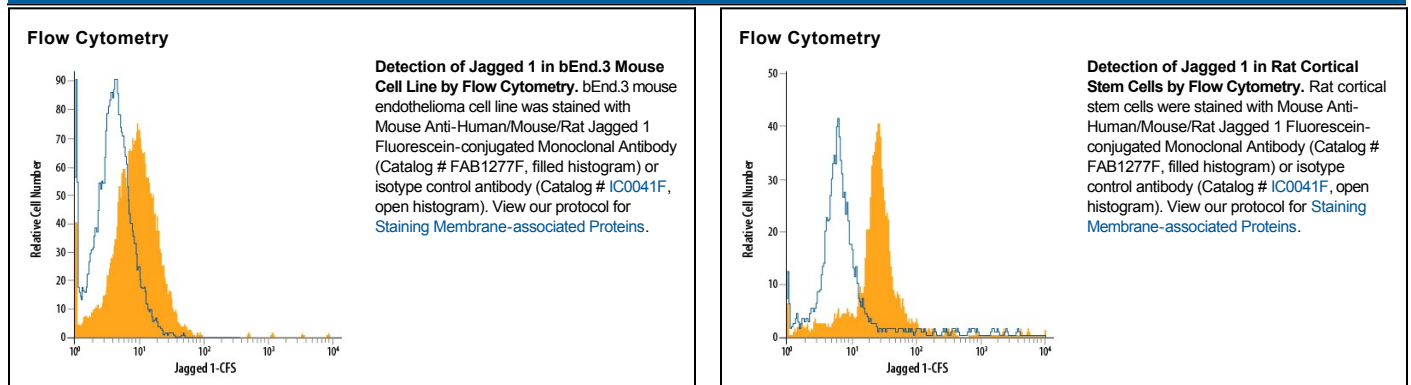
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Jagged 1. In direct ELISAs, no cross-reactivity with recombinant human Jagged 2 is observed. Stains human Jagged 1 transfectants but not the parental cell line or human Jagged 2 transfectants in flow cytometry.
Source	Monoclonal Mouse IgG _{2B} Clone # 188331
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0-derived recombinant human Jagged 1 Ser32-Asp296 Accession # P78504
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	10 µL/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Jagged 1 is a 180 kDa type I transmembrane glycoprotein and member of the Delta-Serrate-Lag-2 (DSL) family of ligands that activate LIN12/Notch proteins. Human Jagged 1 is synthesized as a 1218 amino acid (aa) precursor that contains a 33 aa signal sequence, a 1034 aa extracellular domain (ECD), a 26 aa transmembrane segment, and a 125 aa cytoplasmic region. The ECD contains a DSL domain (aa 185-229), a cysteine-rich region, 15 EGF-like repeats, of which many bind calcium, and nine potential sites for N-linked glycosylation. Mature human Jagged 1 shares 97% and 96% aa identity with mature mouse and rat Jagged 1, respectively. Jagged 1 is widely expressed in adult and fetal tissues. Jagged-Notch signaling specifies cell fate, regulates pattern formation, defines boundaries between different cell types, and modulates cell proliferation and differentiation, especially during hematopoiesis, myogenesis, neurogenesis, and development of vasculature (1-8). Mutations in human Jagged 1 are the cause of Alagille syndrome, an autosomal-dominant disorder characterized by intrahepatic cholestasis and abnormalities of heart, eye, vertebrae, as well as characteristic facial appearance (9, 10).

References:

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