Human/Mouse IL-19 Alexa Fluor® 750-conjugated Antibody

Monoclonal Rat IgG_{2B} Clone # 350114

Catalog Number: FAB2915S

100 µg

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse IL-19 in direct ELISAs and Western blots.
Source	Monoclonal Rat IgG_{2B} Clone # 350114
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant mouse IL-19 Leu25-Ala176 Accession # Q8CJ70
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

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. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Interleukin 19 (IL-19) is a member of the IL-10 family of cytokines (1). The IL-10 family is a class II α-helical collection of cytokines that contains two groups, a viral homolog and a cellular homolog group. Within the cellular homolog group, there are two additional groupings, one which uses IL-10 R2 as a signal transducing receptor (IL-10, IL-22 and IL-26), and one which uses IL-20 R2 as a signal transducing receptor (IL-19, IL-20 and IL-24) (2 - 4). Mouse IL-19 is synthesized as a 176 amino acid (aa) precursor that contains a 24 aa signal sequence and a 152 aa mature region (5). It is secreted as a glycosylated monomer, 35 - 45 kDa in size (2, 6, 7). IL-19 is unusual in that it contains seven amphipathic helices (2, 4, 8). Mature mouse IL-19 shares 69% aa sequence identity with the mature human IL-19, and 85% and 68% aa identity with rat and canine IL-19, respectively. Although mouse IL-19 is active on human cells, human IL-19 is not active on mouse cells (5). IL-19 expression is limited to activated keratinocytes and monocytes, with a possible contribution from B cells (6, 9, 10). IL-19 binds a receptor complex consisting of the IL-20 receptor alpha (also known as IL-20 R1) and the IL-20 receptor beta (IL-20 R2) (3, 4, 11, 12). This receptor complex is also shared by IL-20 and IL-24. Notably, IL-19 is reported to actually bind to IL-20 R2, which is generally considered to be only the signal transducing receptor subunit (7, 13). Functionally, it has been reported that IL-19 both will and will not induce IL-6 and TNF production by monocytes (5, 14). It does, however, seem to drive T-helper cell differentiation towards a Th2 response, inducing both IL-10 and production of itself (5, 14, 15).

PRODUCT SPECIFIC NOTICES

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