

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human MED12 in direct ELISAs. In direct ELISAs, less than 1% cross-reactivity with recombinant human MED4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human MED12 Asn1305-Ser1459 Accession # Q93074
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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
Immunocytochemistry	5-15 µg/mL	Immersion fixed BG01V human embryonic stem cells and D3 mouse embryonic stem cells

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

MED12 (Mediator complex subunit 12; also HOPA, ARC240, TRAP230 and DRIP240) is a ubiquitous 230-250 kDa member of the Mediator complex subunit 12 family of proteins. It is part of a 20+ subunit complex named Mediator that serves as a bridge between RNA polymerase II and DNA binding regulatory proteins that cooperate during RNA synthesis. Within this complex, MED12 is specifically involved in coordinating Wnt and SHH signaling. MED12 also is suggested to act independently of Mediator, possibly by activating CDK8 kinase in the CDK8 subcomplex. Human MED12 is 2177 amino acids (aa) in length. It contains a LCEWAV region (aa 285-757), a Pro-rich segment (aa 1732-1777) and a Mediator catenin-binding domain (aa 1817-2020). There are six utilized phosphorylation sites. MED12 has three potential isoform variants. One contains a 17 aa substitution for aa 1676-2177, a second possesses an alternative start site at Met154, while a third shows a three aa insertion after Gln1916. Over aa 1305-1459, human MED12 shares 99% aa sequence identity with mouse MED12.