

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	EF-TU, Mouse, clone 900		
<b>Catalog number</b>	HM6010-20UG		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	200 µl	<b>Amount</b>	20 µg
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	<b>Concentration</b>	100 µg/ml
<b>Host Species</b>	Mouse IgG2a	<b>Conjugate</b>	None
<b>Endotoxin</b>	N.A.	<b>Purification</b>	Protein G
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Yes			•			•		•
No								
N.D.	•	•		•	•		•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- W: Bacterial EF-Tu reveals a molecular mass of 43-47 kDa, whereas archaeal EF-Tu reveals as either 80 or 60 kDa (Ref. 1)

**General Information**

<b>Description</b>	The monoclonal antibody 900 recognizes elongation factor Tu (EF-Tu), a 43 kDa multifunctional protein present in <i>Escherichia coli</i> . EF-Tu is one of the most abundant proteins present in prokaryotes, representing about 5 % of the total cellular protein of <i>E. coli</i> . During protein biosynthesis, the elongation process, EF-Tu catalyzes the binding of each aminoacyl-tRNA to the ribosome. It also interacts with several macromolecules and guanine nucleotides, including EF-Ts, GDP, GTP, and some ribosomal proteins. Monoclonal antibody 900 recognizes EF-Tu in organisms belonging to bacterial and archaeal domains, yet no organisms from the eukaryotic domain. The panbacterial distribution of EF-Tu, which is present in large amounts in every prokaryotic cell, renders this protein a good candidate for diagnostic purposes. The highly conserved epitope recognized by monoclonal antibody 900 is located at the very end of the N-terminus of the EF-Tu molecule (SKEKFE).
<b>Immunogen</b>	<i>E. coli</i> K-12 C600 Rif ( pKT146) bacteria
<b>Aliases</b>	<i>Escherichia coli</i> Elongation Factor TU, EF-TU, Elongation factor TUF, Elongation factor Tu
<b>Cross reactivity</b>	<i>Bacteroides fragilis</i> : Yes; <i>Streptococcus oralis</i> : Yes; <i>Bacillus subtilis</i> : Yes; <i>Pseudomonas aeruginosa</i> : Yes; <i>Burkholderia cepacia</i> : Yes; <i>Deinococcus sp.</i> : Yes; <i>Mycobacterium tuberculosis</i> : Weak.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Weber, S et al; An epitope of elongation factor Tu is widely distributed within the bacterial and archaeal domains. <i>J Bacteriol</i> 1995, <i>177</i>: 11</li> <li>2. Baensch, M et al; Conservation of the amino-terminal epitope of elongation factor Tu in eubacteria and archaea. <i>Microbiology</i> 1998, <i>144</i>: 2241</li> <li>3. Kunert, A et al; Immune evasion of the human pathogen <i>Pseudomonas aeruginosa</i>: elongation factor Tuf is a factor H and plasminogen binding protein. <i>J Immunol</i> 2007, <i>179</i>: 2979</li> </ol>
<b>Storage&amp;stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

**Precautions**

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

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We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC  
Brenda Teunissen

Date  
14/07/2021

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).