Anti-Human IL6 Antibody [K06301_22C3]

Catalog No. K06301M22C03C

<table>
<thead>
<tr>
<th>Overview</th>
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<tbody>
<tr>
<td>Product name</td>
<td>Anti-Human IL6 Antibody [K06301_22C3]</td>
</tr>
<tr>
<td>Antibody specificity</td>
<td>Interleukin-6 (IL-6)</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Human</td>
</tr>
<tr>
<td>Clonality</td>
<td>Monoclonal</td>
</tr>
<tr>
<td>Clone number</td>
<td>K06301_22C3</td>
</tr>
<tr>
<td>Host / isotype</td>
<td>Mouse / IgG2b</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Recombinant human IL-6</td>
</tr>
<tr>
<td>Cross reactivity</td>
<td>Not cross-react with human IL1B, IL2, IL4, IL5, IL7, CXCL8, IL9, IL10, IL11, IL12, IL13, CSF2, IFNA, IFNG, CCL2, KITLG and TNF</td>
</tr>
</tbody>
</table>
| Kinetic characterization by BLI (biolayer interferometry) | Association rate constant ($k_{\text{on}}$): 2.37 x 10^6 M⁻¹s⁻¹  
Dissociation rate constant ($k_{\text{off}}$): 2.81 x 10⁻⁴ s⁻¹  
Equilibrium dissociation constant ($K_D$): 1.18 x 10⁻¹⁰ M |
| Purification      | Protein A purified from cell culture supernatants |
| Form              | Liquid                               |
| Concentration     | 1 mg/mL in phosphate buffered saline containing 0.09% preservative |
| Conjugation       | Unconjugated                         |
| Shipping, storage and shelf life | Shipped at ambient temperature. Avoid repeated freeze-thaw cycles.  
Upon receipt,  
* 3 months when stored at 2 to 8 °C  
* 1 year when aliquoted and stored at -20 °C  
* 3 years when aliquoted and stored at -80 °C |

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<thead>
<tr>
<th>Applications</th>
<th>Recommended concentration</th>
<th>Note</th>
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</thead>
<tbody>
<tr>
<td>Western blot (WB)</td>
<td>1 µg/mL</td>
<td></td>
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<tr>
<td>Indirect ELISA</td>
<td>1 µg/mL</td>
<td></td>
</tr>
<tr>
<td>Sandwich ELISA</td>
<td>3 µg/mL</td>
<td>K06301_22C3 can pair with peroxidase conjugated K16255_5H11 for sandwich ELISA. K06301_22C3 is used as the capture antibody.</td>
</tr>
</tbody>
</table>

Note:  
* The applications above have already been verified. The antibody may be suitable for additional applications.  
* Optimal antibody concentrations for each application should be determined by the user.

<table>
<thead>
<tr>
<th>Additional information</th>
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<tbody>
<tr>
<td>Target antigen</td>
<td>Protein name: Interleukin 6</td>
</tr>
<tr>
<td></td>
<td>Gene name: IL6</td>
</tr>
<tr>
<td></td>
<td>UniProt Accession: P05231</td>
</tr>
<tr>
<td></td>
<td>Organism: Homo sapiens (Human)</td>
</tr>
<tr>
<td>Paired antibody information</td>
<td>K06301_22C3 may pair with K16255_5H11, K06301_19H9 and K03005_15B1 for sandwich based immune assays.</td>
</tr>
</tbody>
</table>
Western blotting

25 ng of recombinant human IL-6 was run on 6-18% SDS-PAGE under reducing conditions and blotted onto nitrocellulose membrane. K06301_22C3 at 1 µg/mL was used as primary antibody and peroxidase conjugated goat anti-mouse IgG was used as secondary antibody. IL-6 band was visualized using ECL Western Blotting Substrate.

Result: K06301_22C3 can detect recombinant human IL-6 by Western blotting.

Sandwich ELISA

Microtiter wells were coated with K06301_22C3 at 3 µg/mL as the capture antibody. Peroxidase conjugated mouse anti-human IL-6 monoclonal antibody (K16255_5H11) was used as the detection antibody.

Result: K06301_22C3 and K16255_5H11 can be used as matched antibody pairs to detect and quantify the concentration of human IL-6.

Cross reactivity

Microtiter wells were coated with various human cytokines. K06301_22C3 was used as primary antibody and peroxidase conjugated goat anti-mouse IgG was used as the secondary antibody.

Result: K06301_22C3 does not cross-react with human IL1B, IL2, IL4, IL5, IL7, CXCL8, IL9, IL10, IL11, IL12, IL13, CSF2, IFNA, IFNG, CCL2, KITLG and TNF.