

## Datasheet for ABIN967611

# anti-TYK2 antibody (pTyr1054)



1

Publication



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| Quantity:            | 0.1 mg                              |
|----------------------|-------------------------------------|
| Target:              | TYK2                                |
| Binding Specificity: | pTyr1054                            |
| Reactivity:          | Human                               |
| Host:                | Mouse                               |
| Clonality:           | Monoclonal                          |
| Conjugate:           | This TYK2 antibody is un-conjugated |
| Application:         | Western Blotting (WB)               |

### **Product Details**

| Brand:           | BD Pharmingen™  |  |
|------------------|---|--|
| Immunogen:       | Phosphorylated peptide of the region including the tyrosines 1054 and 1055 of human Tyk2  |  |
| Clone:           | l114-617  |  |
| Isotype:         | IgG1 kappa  |  |
| Characteristics: | <ol> <li>Since applications vary, each investigator should titrate the reagent to obtain optimal results.</li> <li>Please refer to us for technical protocols.</li> <li>Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.</li> </ol> |  |
| Purification:    | The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.   |  |

#### Target Details

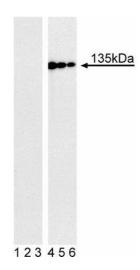
| Target Details      |   |  |  |
|---------------------|---|--|--|
| Target:             | TYK2  |  |  |
| Alternative Name:   | Tyk2 (TYK2 Products)  |  |  |
| Background:         | Tyk2 is a widely expressed protein tyrosine kinase (PTK) of 1187 amino acids (135 kDa). The N-terminal kinase-related domain of Tyk2 shows 54% identity to the kinase-related domain of the JAK1 kinase. Surprisingly, the catalytic region of JAK1 shares more sequence identity to Tyk2 than it does with JAK2 kinase. The similarity of structure between Tyk2 and JAK1 suggests that both may be involved in related phosphorylation cascades. Tyk2 plays a critical role in the interferon (IFN)-a/b response while JAK1 shows involvement in both the IFN- a/b and IFN-g signal transduction pathways. JAK2, however, appears to be required only in the IFN-g response. It has been suggested that a portion of the large extracatalytic domain of Tyk2 could interact with components of the IFN a/b receptor.  The I114-617 monoclonal antibody recognizes the phosphorylated Y1054 and Y1055 in the tyrosine kinase domain of Tyk2. |  |  |
| Molecular Weight:   | 135 kDa   |  |  |
| Pathways:           | JAK-STAT Signaling, Hepatitis C   |  |  |
| Application Details |   |  |  |
| Comment:            | Related Products: ABIN967389  |  |  |
| Restrictions:       | For Research Use only   |  |  |
| Handling            |   |  |  |
| Format:             | Liquid  |  |  |

| Format:            | Liquid   |  |
|--------------------|--|--|
| Concentration:     | 0.5 mg/mL  |  |
| Buffer:            | Aqueous buffered solution containing ≤0.09 % sodium azide.   |  |
| Preservative:      | Sodium azide   |  |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |  |
| Storage:           | 4 °C   |  |
| Storage Comment:   | Store undiluted at 4°C.  |  |

Product cited in:

Gauzzi, Velazquez, McKendry, Mogensen, Fellous, Pellegrini: "Interferon-alpha-dependent activation of Tyk2 requires phosphorylation of positive regulatory tyrosines by another kinase." in: **The Journal of biological chemistry**, Vol. 271, Issue 34, pp. 20494-500, (1996) (PubMed).

#### **Images**



#### **Western Blotting**

**Image 1.** Western blot analysis of Tyk2 (pY1054/pY1055) in human Burkitt's lymphoma. Lysates from control (first panel) and IFN-a-activated (second panel) Daudi cells were probed with purified mouse anti-Tyk2 (pY1054/pY1055) monoclonal antibody) at concentrations of 4, 2, and 1  $\mu$ g/ml (Lanes 1, 2, and 3, respectively). Tyk2 (pY1054/pY1055) is identified as a band of 135 kDa in the treated cells.