Product description

Name: Anti-Cytochrome P450 1A2 [D15]

Alternate names: DT15

Species Reactivity: Human, Mouse, Rat

Specificity: Highly specific for CYP1A family members. Reacts strongly with CYP1A2 and shows expected cross-reactivity with CYP1A1 due to high sequence homology. No significant cross-reactivity observed outside the CYP1A subfamily.

Host Species: Mouse

Clonality: Monoclonal

Clone: D15

Isotype: IgG1k

Target: Cytochrome P450 1A2 (CYP1A2), a member of the CYP1A subfamily involved in xenobiotic and drug metabolism.

Immunogen: Purified rat CYP1A2 protein. MC1a (Preparation C31B4, rat liver cytochrome P4501A2)

Antigen MW: 52 kDa

Conjugate: Unconjugated

Applications: ELISA ; IHC ; IF ; WB

Contributor(s)

Inventor: Roland Wolf
Institute: Syngenta Crop

Properties

Format: Liquid

Concentration: 1 mg/ml

Storage buffer: PBS with 0.02% azide

Storage conditions: -20° C

Shipping conditions: Dry ice

Purification: Affinity chromatography

Purity: Greater than 90%, as determined by SDS-PAGE

Directions for use: The applications listed for this monoclonal antibody are derived from information supplied by the originating laboratory and/or relevant published literature. These applications have not been independently validated by CancerTools.org. End users are responsible for performing appropriate titration and optimization for their experimental system. Application-specific guidelines will be provided when available.

The DT15 monoclonal antibody has been extensively characterised by immunoblotting:

- Recombinant Proteins: Reacts only with recombinant human CYP1A1 and CYP1A2.
- Human Liver Microsomes: Detects a single protein band corresponding to CYP1A2.
- Mouse and Rat Liver Microsomes: Low basal signal in control samples; strong induction observed following treatment with CYP1A inducers (e.g., phenobarbital, 3-methylcholanthrene in mouse; β-naphthoflavone in rat).

These results are consistent with the known inducible expression profile of CYP1A enzymes.

Recommended Working Concentration: 0.1 µg/mL for Western blotting (typical)

References

- Getachew et al. 2010. Biochem Pharmacol. 79(9):1363-71. PMID: 20036646.
- Seibert et al. 2009. J Proteome Res. 8(4):1672-81. PMID: 19714871.
- Lane et al. 2007. Mol Cell Proteomics. 6(6):953-62. PMID: 17296599.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Anti-Cytochrome P450 1A2 [D15], was invented by Roland Wolf at Syngenta Crop (CancerTools.org, 151201).