

<b>Product Name:</b>	2, 3, 5-Triiodobenzoic acid
<b>Product Number:</b>	T106
<b>CAS Number:</b>	88-82-4
<b>Molecular Formula:</b>	$C_7H_3I_3O_2$
<b>Molecular Weight:</b>	499.81
<b>Description:</b>	2, 3, 5-Triiodobenzoic acid (TIBA) is used as a plant growth regulator and defoliant and agricultural herbicide. It is a non-competitive polar auxin transport inhibitor. It is a member of the class of benzoic acids in which the hydrogen atoms at positions 2, 3, and 5 are replaced by iodine atoms. <i>In vitro</i> , it can suppress somatic embryo formation. 2, 3, 5-Triiodobenzoic acid is insoluble in water, very soluble in ethanol, and soluble in KOH and NaOH.
<b>Mechanism of Action:</b>	2, 3, 5-Triiodobenzoic acid is an auxin transport inhibitor, much like its naturally occurring relative Quercetin.
<b>Plant Biology Applications</b>	The influence of 2, 3, 5-Triiodobenzoic acid and abiotic stress on gene expression of <i>bPIN</i> , <i>SbLAX</i> and <i>SbPGP</i> gene families was studied in <i>Arabidopsis</i> , rice and sorghum. Authors analyzed the chromosome distribution, gene duplication, and intron/exon distribution. TIBA did not increase expression of auxin transporter genes. The transcription of the auxin transporter genes was controlled by auxin transport inhibitors, but it had no connection to the concentration of TIBA used (Shen et al, 2010).
<b>References:</b>	<p>Choi YE, Kim HS, Soh WY and Yang DC (1997) Developmental and structural aspects of somatic embryos formed on medium containing 2,3,5-triiodobenzoic acid. <i>Plant Cell Rep.</i> 16(11):738-744</p> <p>Shen C et al (2010) Expression profile of PIN, AUX/LAX and PGP auxin transporter gene families in <i>Sorghum bicolor</i> under phytohormone and abiotic stress. <i>FEBS J.</i> 277(14):2954-2969 PMID 20528920</p> <p>Snyder WE (1949). Some responses of plants to 2,3,5-Triiodobenzoic acid. <i>Plant Physiol.</i> 24(2):195-206</p> <p>Thomson K, Hertel, R, Muller S and Tavares JE (1973). 1-N-naphthylphthalamic acid and 2,3,5-triiodobenzoic acid. <i>Planta</i> 109(4):337-352</p>

