

Certificate of Analysis Dutasteride

CAS No.	164656-23-9	Code	BIOJDTS001
Batch No	DTS-250402	Manufacture Date	Apr.24, 2025
Expiry Date	Apr.23, 2028	Quantity	100G

Testing Items	Specifications	Results
Character	White or off-white powder	Off-white powder
	A: Infrared absorption	Complies
Identification	B: The retention time of the major peak of the sample solution corresponds to that of the standard solution, as obtained in the assay.	Complies
Solubility	Soluble in ethanol and methanol, slightly soluble in polyethylene glycol 400, and insoluble in water.	Complies
Residue on ignition	Not more than 0.1%	0.04%
Heavy metals	Not more than 20ppm	Complies
Water	Not more than 0.50%	0.14%
Optical rotation	+15.0°~ +25.0°	+20.0°
Limit of platinum	Not more than 5 ug/g	Complies
	Acetonitrile≤0.3%	Not detected
Limit of residual solvents	Ethyl acetate≤0.2%	Not detected
	Dioxane≤0.1%	Not detected
	n-Heptane≤0.5%	Not detected
Organic impurities Procedure 1	Dutasteride acid≤0.2%	Not detected
	Dutasteride dimethylamide≤0.2%	0.04%
	Dutasteride methyl ester≤0.15%	Not detected
	Dutasteride ethyl ester≤0.2%	Not detected
	Dutasteride 17α-5-ene≤0.2%	Not detected
	Dutasteride 17α-epimer≤0.3%	0.07%
	Chlorodutasteride≤0.4%	Not detected
	Dihydrodutasteride≤0.15%	0.01%
	Dutasteride-5-ene≤0.3%	Not detected
	Any other individual impurity≤0.1%	0.03%
	Dutasteride α-dimer≤0.3%	Not detected
Organic impurities Procedure 2	Dutasteride β-dimer≤0.5%	Not detected
	Any other individual impurity ≤0.1%	0.06%
	Total impurities ≤2.0%	0.25%
Assay(HPLC)	97.0%~102.0% (Calculated on the dried basis)	100.1%

	Methanol≤3000ppm	428ppm
	Dichloromethane≤600ppm	Not detected
	Toluene≤890ppm	Not detected
Residual solvents	Chloroform≤60ppm	Not detected
	Benzene≤2ppm	Not detected
	Pyridine≤200ppm	Not detected
	DMF≤880ppm	Not detected
Conclusion	This product conforms to USP42 standard	

^{*}Storage condition: Store below 25°C, Protect from moisture and light.